SHOUT
SHARE
IT

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES

QH
7
E135
SI

EANHS

BULLETIN

NOV 1 4 1987

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

CONTENTS

Report on the Second Annual Nairobi Bird Census 2
North Nandi Expedition 6
Diani Bush 10
The Palm Swift 11
Notes on Collection of Fungi 13
Golden Cat in the Aberdare Forest 14
Obituary. Mr H.M. Gardner 15
Annual General Meeting 15
Society Lecture Notes 16
For Sale 17
Society Notes 18
New Members 19
Society Functions 20

REPORT ON THE SECOND ANNUAL NAIROBI BIRD CENSUS

The census of birds within the Nairobi Provincial boundary, carried out on Sunday, 9th December 1979 was a great popular success. A total of 108 members and friends took part, covering the area in about 72 parties. The weather was fine and sunny, making a change from the wet windy weather during last year's census.

Despite our fears that the Second Annual Nairobi Bird Census would produce less species than last year due to the dry weather, we found when all the lists were in the following figures: (last year's figures given in parenthesis)

Number of participants	108	(62)
Number of parties	72	(40)
Number of species	304	(265)
Number of individuals	14,964	(9,917)
Number of hours in field	305	(245)

Eighty three species had one record in 1979 (90 in 1978), again showing that a large participation is important. Members will notice that much better coveridge of wetland areas was achieved this year with many new species added to the census list.

We would like to thank all those who participated in the census and we hope to see you again next year. A complete list of numbers, species and participants follows.

PARTICIPANTS IN THE SECOND ANNUAL NAIROBI BIRD CENSUS

Mrs Jane Carson, Mrs Fleur Ng'weno, John Gerhart, Wayne Short, Brian Baum, E.H. Risley, Dennie and Eileen Angwin, Joan and John Karmali, John and Betty Stelfox, William Knox, Mr and Mrs J.B. Molloy, Mrs A.E. Visagie, Susan and Simon Stagg, Clive and Robbie Kelly, Kate Parkey, Richard Lloyd, Paul and Elish Keogh, Roger, Pat and Jessica Wootton, Jane and Michael Hyden, Dr K.M. Price, Ms Anne Weale, Peter Trueblood, Mrs G. Beecher, Mr and Mrs P.J. Frere, Mrs Cilla White, A. and M. Bush, Jack and Eleanor Barrott, Dr and Mrs Loefler, D.A. Turner, D.E. Pomeroy, R. Kulankash, B. Tengecho, P. Ochumba, P. Mahindi, E. Kairu, B.S. Meadows, Jim Laird, R. and V. Daniell, J.K. and F.M. Edwards, M.D. Gwynne, L.H. Brown, Priscilla Allen, Mr and Mrs Caldwell, Dilip Lakhani, Daphne Curtis, Mrs D.W. Whittaker, Ray Moore, Tom Weir, P.R. McCosh, M.T. Bamford, Adrian D. Lewis, Miss Rose Izagiriza, Jean Hayes, John Kerr, Sue Boulton, Teena Abel, Ivan and Denise Duncan, Bakul Sangani, Smita Shah, Alkesh Dave, June and Keith Taylor, Richard and Christina Noyes, Mrs M. MacLennan, Mrs P. Nickalls, Mrs B.B., Vincent and Victor Maloba, Ebbe la Cour, Louise Fordyce, Susan and Clifford Gilpin, Mrs M.L. Watts, Jess Ball, Lionel Hartley, Mr and Mrs Lydall, June Dirks, Mr and Mrs P.J. Hewett, Mr and Mrs I. Lane, Mr and Mrs Dempster, Mr W.J.F. Rutherford, Ian and Maidie McFerran, V.A. Crosby, Audrey Bonnett.

AREAS COVERED DURING THE CENSUS

Karen, Langata, Karura Forest, Westlands, Lower Kabete, Kiambu Road, Ngong Road Race Course, City Centre, Dandora including Kariobangi, Dandora and New Dandora oxidation ponds, Golf Range, Rosslyn, Kabete Vet. Labs, Spring Valley, Kyuna Estate, Parklands, Arboretum, City Park, Chiromo Campus, Loresho Estate, Nairobi National Park, Closeburn Estate, Ruaraka, Kenyatta University Campus, Dagoretti Corner, Lavington, Rowallen Camp, Muthaiga and Kileleshwa.

SPECIES AND NUMBERS RECORDED DURING THE NAIROBI BIRD CENSUS
(Figures from the First Census are given in parenthesis after the 1979 figure; species not recorded last year are given in capital letters. We regret the list cannot be tabulated as this takes up a great deal of valuable space Ed.)

Ostrich 140 (8); Little Grebe 27 (18); PINK-BACKED PELICAN 9; Long-tailed Cormorant 10 (2); DARTER 2; Cattle Egret 312 (17); Yellow-billed Egret 25 (11); GREAT WHITE EGRET 8; Grey Heron 18 (4); Black-headed Heron 102 (28); Purple Heron 3 (2); Hammerkop 18 (13); BLACK STORK 4; Marabou Stork 499 (27); YELLOW-BILLED STORK 43; OPENBILL STORK 2; Sacred Ibis 228 (64); Hadada Ibis 82 (92); WHITE-FACED TREE DUCK 156; FULVOUS TREE DUCK 60; Egyptian Goose 21 (9); Spur-wing Goose 1 (1); Knob-billed Goose 5 (1); YELLOW-BILLED DUCK 44; PINTAIL 60; Red-billed Duck 136 (64); HOTTENTOT TEAL 15; Garganey 71 (5); EUROPEAN TEAL 1; SHOVELER 34; AFRICAN POCHARD 113; White-backed Duck 11 (10); HOODED VULTURE 5; LAPPET-FACED VULTURE 2; Ruppell's Griffon Vulture 21 (3); White-backed Vulture 160 (10); Egyptian Vulture 3 (2); PALLID HARRIER 6; AFRICAN MARSH HARRIER 1; Harrier Hawk 1 (1); Bateleur 4 (7); BLACK-CHESTED SNAKE EAGLE 2; BROWN SNAKE EAGLE 1; GREAT SPARROW HAWK 1; African Goshawk 1 (5); Gabar Goshawk 2 (1); Augur Buzzard 56 (26); Mountain Buzzard 1 (1); Steppe Buzzard 9 (8); Long-crested Hawk Eagle 15 (6); AFRICAN HAWK EAGLE 1; CROWNED EAGLE 2; Tawny Eagle 11 (4); STEPPE EAGLE 5; Fish Eagle 2 (1); Kite 310 (188); Black-shouldered Kite 22 (32); Peregrine 3 (1); EUROPEAN KESTREL 6; Secretary Bird 14 (4); Harlequin Quail 3 (2); Helmeted Guinea Fowl 40 (81); Black Crake 18 (7); African Moorhen 18 (5); PURPLE GALLINULE 3; Yellow-necked Spurfowl 42 (9); Red-knobbed Coot 37 (1); Crowned Crane 15 (15); White-bellied Bustard 1 (5); Jacana 7 (3); Blacksmith Plover 31 (10); Crowned Plover 59 (50); Black-winged Plover 2 (3); Ringed Plover 1 (5); Kittlitz's Sand Plover 5 (1); Three-banded Plover 4 (2); Greenshank 14 (2); Marsh Sandpiper 1 (1); Wood Sandpiper 36 (22); Green Sandpiper 6 (6); Common Sandpiper 6 (11); AFRICAN SNIPE 2; Little Stint 128 (375); Ruff 52 (11); SPOTTED REDSHANK 15; BLACK-WINGED STILT 21; TEMMINCK'S COURSER 4; GREY-HEADED GULL 3; BLACK-HEADED GULL 26; WHISKERED TERN 10; YELLOW-THROATED SANDGROUSE 300; Speckled Pigeon 12 (4); Pink-breasted Dove 11 (27); Red-eyed Dove 215 (150); Ring-necked Dove 114 (29); Laughing Dove 195 (40); Tambourine Dove 1 (1); Emerald-spotted Wood Dove 10 (5); Green Pigeon 31 (22); Hartlaub's Turaco 13 (21); BLACK AND WHITE CUCKOO 1; Red-chested Cuskoo 18 (8); Klaas' Cuckoo 18 (9); Didric Cuckoo 16 (5); Emerald Cuckoo 14 (4); White-browed Coucal 4 (2); BARN OWL 4; African Wood Owl 4 (3); GABON NIGHTJAR 1; Abyssinian Nightjar 13 (2); MOTTLED SWIFT 20; EUROPEAN SWIFT 20; Nyanza Swift 13 (4); White-rumped Swift 26 (19); Little Swift 214 (246); Palm Swift 1 (4); Speckled Mousebird 592 (385); Blue-naped Mousebird 10 (35); Narina's Trogon 11 (10); Giant Kingfisher 3 (2); Pied Kingfisher 8 (1); Malachite Kingfisher 4 (1); PIGMY KINGFISHER 2; Striped Kingfisher 1 (3); European Bee-eater 68 (29); Little Bee-eater 14 (12); Cinnamon-chested Bee-eater

129 (100); Lilac-breasted Roller 2 (1); African Hoopoe 15 (19); SCIMITAR-BILL 3; GREY HORNBILL 4; Silvery-cheeked Hornbill 18 (1); White-headed Barbet 19 (15); SPOTTED-FLANKED BARBET 5; RED-FRONTED BARBET 1; RED-FRONTED TINKER-BIRD 1; Golden-rumped Tinker-Bird 61 (8); D'ARNAUD'S BARBET 2; Greater Honeyguide 1 (2); Lesser Honeyguide 2 (2); Eastern Honeybird 4 (1); Red-breasted Wryneck 1 (3); Nubian Woodpecker 7 (2); Cardinal Woodpecker 6 (7); Brown-backed Woodpecker 1 (2); Grey Woodpecker 6 (3); FISCHER'S/YELLOW-COLLARED LOVEBIRD 16;

Rufous-naped Lark 51 (44); RED-CAPPED LARK 36; African Short-toed Lark 50 (3); Fischer's Sparrow-Lark 11 (100); Short-tailed Lark 4 (2); SINGING BUSH LARK 1; EUROPEAN SAND MARTIN 10; BANDED MARTIN 1; African Sand Martin 62 (16); European Swallow 637 (73); Wire-tailed swallow 12 (1); MOSQUE SWALLOW 2; Red-rumped Swallow 29 (34); Striped Swallow 127 (21); African Rock Martin 26 (47); Black Rough-wing 61 (125); Yellow Wagtail 408 (382); Mountain Wagtail 4 (10); Pied Wagtail 34 (29); White Wagtail 5 (2); Cape Wagtail 3 (2); Richard's Pipit 23 (17); Red-throated Pipit 14 (13); Tree Pipit 7 (13); Yellow-throated Longclaw 26 (20); Grey Cuckoo Shrike 4 (3); Black Cuckoo Shrike 7 (7); Yellow-vented Bulbul 396 (242); Slender-billed Greenbul 8 (10); Yellow-whiskered Greenbul 41 (41); Yellow-bellied Greenbul 5 (4); Placid Greenbul 20 (38); Brubru Shrike 9 (4); Black-backed Puff-back Shrike 44 (42); Brown-headed Tchagra 3 (1); BLACK-HEADED TCHAGRA 1; Tropical Boubou 100 (57); Slate-coloured Boubou 5 (2); Sulphur-breasted Bush-Shrike 10 (7); Long-tailed Fiscal 38 (20); Fiscal Shrike 237 (243); Stonechat 8 (5); Wheatear 31 (38); Pied Wheatear 10 (24); ISABELLINE WHEAT-EAR 16; Rock Thrush 1 (2); Red-backed Scrub-Robin 3 (4); White-starred Bush Robin 4 (8); Olive Thrush 159 (120); Robin Chat 43 (47); Ruppell's Robin Chat 78 (41); WHITE-BROWED ROBIN CHAT 1; Northern Pied Babbler 29 (54); FAN-TAILED WARBLER 1; Lesser Swamp Warbler 3 (3); Yellow Flycatcher Warbler 3 (2); Moustache Warbler 1 (4); OLIVACEOUS WARBLER 1; Garden Warbler 1 (1); Black-capped Warbler 12 (12); WHITETHROAT 2; Willow Warbler 15 (11); Red-faced Cisticola 6 (5); Singing Cisticola 87 (69); Rattling Cisticola 18 (10); Winding Cisticola 28 (52); Stout Cisticola 10 (10); Pectoral-patch Cisticola 26 (10); DESERT CISTICOLA 2; Tawny-flanked Prinea 38 (57); Black-collared Apalis 9 (9); Yellow-breasted Apalis 46 (37); Grey Apalis 4 (9); Black-headed Apalis 4 (1); BUFF-BELLIED WARBLER 3; Grey-capped Warbler 15 (12); Grey-backed Cameroptera 39 (44); Yellow-bellied Eremomela 11 (1); Red-faced Crombec 6 (4); Spotted Flycatcher 8 (2); Dusky Flycatcher 42 (28); Pale Flycatcher 16 (6); GREY FLYCATCHER 2; White-eyed Slaty Flycatcher 150 (95); SOUTH AFRICAN BLACK FLYCATCHER 2; Chin-spot Puff-back Flycatcher 52 (44); Paradise Flycatcher 57 (38); RED-THROATED TIT 1; White-bellied Tit 68 (56); Drongo 7 (3); Black-headed Oriole 35 (17); Pied Crow 274 (80); WHITE-NAPED RAVEN 1; Wattled Starling 30 (250); Blue-eared Glossy Starling 2 (70); Ruppell's Long-tailed Starling 3 (15); RED-WING STARLING 21; HILDEBRANT'S STARLING 21; Superb Starling 162 (78); Red-billed Oxpecker 19 (3); Yellow-billed Oxpecker 3 (3); Common White Eye 114 (211); Kikuyu White Eye 73 (46); Bronze Sunbird 237 (170); Beautiful Sunbird 18 (2); Green-headed Sunbird 4 (2); Variable Sunbird 282 (180); NORTHERN DOUBLE COLLARED SUNBIRD 4; Eastern Double Collared Sunbird 11 (15);

Amethyst Sunbird 64 (39); Scarlet-chested Sunbird 46 (30); Collared Sunbird 59 (67); MARIQUA SUNBIRD 7; White-browed Sparrow-Weaver 25 (1); Grey-headed Social Weaver 2 (30); Kenya Rufous Sparrow 182 (204); Parrot-billed/Grey-headed Sparrow 110 (43); YELLOW-SPOTTED PETRONIA 2; Layard's Black-headed Weaver 289 (221); Speke's Weaver 359 (70); Masked Weaver 3 (32); VITELLINE MASKED WEAVER 3; Spectacled Weaver 21 (35); Holub's Golden Weaver 70 (62); Reichenow's Weaver 392 (322); Grosbeak Weaver 116 (51); RED-HEADED WEAVER 2; GOLDEN-BACKED WEAVER 1; Red-billed Quelea 17 (85); Yellow Bishop 8 (5); White-winged Widow Bird 75 (20); Red-naped Widow Bird 38 (227); Jackson's Widow Bird 137 (163); Bronze Mannikin 653 (629); Rufous-backed Mannikin 27 (34); QUAIL FINCH 1; PARASITIC WEAVER 26; African Fire Finch 71 (59); Red-billed Fire Finch 171 (123); Yellow-bellied Waxbill 18 (2); Common Waxbill 325 (177); Crimson-rumped Waxbill 46 (113); Black-cheeked Waxbill 5 (2); Red-cheeked Cordon Bleu 56 (25); Purple Grenadier 15 (6); Common Indigo Bird 45 (18); Pin-tailed Whydah 70 (49); Yellow-fronted Canary 2 (1); Brimstone Canary 15 (1); White-bellied Canary 1 (2); YELLOW-CROWNED CANARY 4; Yellow-rumped Seed-eater 29 (45); Streaky Seed-eater 361 (333); Thick-billed Seed-eater 5 (8); African Citril 56 (85); Golden-breasted Bunting 19 (21); Cinnamon-breasted Rock Bunting 6 (3).

The following Identification Sheet was also received; members comments please (Ed.)

Name of Species	Common Hoodwink (*Dissimulatrix spuria*)
Name of Observer	L.H. Brown
Location	Anywhere
Time of Day	All day long
Length of Observation	Repeated, at about 2 minute intervals
Distance	Point blank range
Lighting	Poor
Optics	Viewed through wrong end of binoculars by mistake

Distinguishing Characteristics   Nondescript, dull brown or greyish, with no obvious markings, about 2 " long, skulking in dense cover.

What was the bird doing ?   Nothing

Were other birds present for size comparison? Which?   Many species. It looked like a great many of them.

What species is this likely to be confused with ?   Common Hoodwink

What distinguishes it from those species ?   Nothing

Where else have you seen this bird previously ?   Everywhere

Characteristic behaviour ?   It did absolutely sweet * * * * made no recognisable noise at all.

Other remarks   A very well known species in this area.

- - * - -

A serious comment was received from Dr M.D. Gwynne - your comments please :

'Bird numbers obtained in this way are, in my opinion, of very little value. It is doubtful whether they can be used to give an indication of relative abundance since there is no form of sampling used. A total numbers count is difficult for birds and cannot be carried out unless specific instructions on methods are given to those doing the census, Many of my figures, for example, certainly include the same birds visiting the garden or overflying it at different times. The census, however, does provide a useful means of obtaining species distribution'.

NORTH NANDI EXPEDITION

Last year a short account was published in the Bulletin of the joint National Museums of Kenya and Natural History Museum, Vienna, expedition to the North Nandi Forest, Kenya. These notes concern our second joint expedition held in November and December 1979 when we were again joined by Dr Herbert Schifter and his wife from Vienna who were accompanied by Dr Witzenberger, Mammalogist and Mr Wiedenroth, taxidermist.

A new area of forest was chosen and a camp site hacked out of the dense undergrowth near Chemisia, some 12 km south of our 1978 expedition site.

Here the forest was somewhat different, decidedly wetter with the result that we had other species of trees, shrubs and ground cover. The major difference was the presence on the trees of many species of epiphytes, almost absent in the Kamwega-Kipsamoiti area of 1978. Trees were festooned with creepers such as Culcasia scandens, commonly found in Kakamega. Lianas were common, massive 'ropes' hanging down from tall trees, but it was the orchids, ferns and mosses which were so noticable. We collected many orchids off felled trees and took these to Nairobi where we hope they will establish on the trees in the museum grounds.

Conspicuous, and all carrying a great mass of waxy white flowers were the large glossy-leafed trees Tabernaemontana (= Conopharyngia) uncommon at the 1978 site. Numerous were tall Dracaena, again almost absent in the previous area while the wild banana, Ensete ventricosum was abundant. These latter two species are a sure sign of near surface water and springs and so we found in the many steep valleys. Ground ferns were present, particularly swamp species with fronds reaching almost 2 metres. Many ground scrubs we noted had 'brace' roots like minature mangroves. These considerably hindered progress down the traces cut for the mist nets, one kept tripping over the cut stems but at other times they became useful hand-holds when descending or ascending the steep slopes.

Few other trees were in flower but we did note Albizzia sp and Bersama sp, and a very lovely small tree with masses of white, pink-spotted bell-shaped flowers, Aulacacalyx diervilleoides. These trees attracted sunbirds as did the parasitic Loranthus, Aegelanthus zizyphifolius and the climbing Combretum paniculatum with its scarlet flowers. Many other trees were just developing new leaf, such as the figs, Ficus sp. We had hoped to find fruiting figs as they attract so many fruit-eating birds, animals and bats. Our 1978 antagonist was present and flowering, the terriably prickly Acanthus arboreus but at this site it was not in such dense stands as in the 1978 area. Brilliantesia had been replaced to some extent with a ? Mimulopsis sp. but the stands were equally dense with up to 20 stems per square metre.

Mike Clifton and the writer collected plants and we were surprised that so many species had not been recorded for the area (Mumias) in Agnew's Upland Kenya Wild Flowers. Surprisingly as in 1978, we found the big purple flowering ground orchid Eulophia porphyroglossum growing in the forest far from water and last year on a recce in this area *Afromontanum* (Zingigeraceae) was found but we could not locate this again in 1979.

The weather treated us kindly. We managed to get to a camp site on November 15th and Alec MacKay and I set the men to work. The lorry with camp equipment managed the road and all was ready for the Vienna team when they arrived on November 17th. It then rained for three days, but after this it was mostly dry. The main track to the camp was made up by local labour kindly organised by the Assistant Chief from Chemisia and thereafter all was plain-sailing.

Tracks through the forest had been made by huge caterpillar tractors many years ago and these were impassable even to a Land Rover so we footed it round the forest and investigated a great deal of the area. The forest had been heavily logged in the past for economic timber and abandoned, but more recently other species of trees have been found suitable for ply board so exploitation continues. It is distressing to note that for one tree taken out, a dozen or more have been felled to make way for extraction. Indeed, where ever we tried to penetrate the forest we found giants felled and left to rot. We could find no trace cut to delimit the eastern boundary of the Nature Reserve, and we can only presume it has become overgrown (cut 1976), but we feel logging and pit-sawing is being undertaken all too close to the Nature Reserve.

Some idea of the wastefulness may be gained from the following. We had two camp fires, one for the cook and the other a general fire. Logs were brought in daily by four men gleaned from over a 100 metre area from camp - around 1000 kg logs per day for 27 days ! Some of those left to rot were over 30 metres long.

Our camp had unwittingly been set up near the roost trees of a troop of Colobus and Blue Monkeys. The Colobus were noisy, roaring at all hours of the night particularly when there was a bright moon and occasionally the Blues would join the chorus. The real roaring back and forth between troops took place when the Crowned Hawk Eagles were present, these predators really worried the monkeys. Also calling at night were the Wood or Woodfords Owl and the rare Red-chested Owlet which we managed to tape record.

One of our early successes was the locating of a sleeping quarter or hole in an acacia tree of the Flying Squirrel, *Anomalurus derbianus*; Alec MacKay will be writing about this interesting creature which until our first North Nandi trip was only known from the Kakamega Forest. We failed to find the Ottershrew, *Potamogale*. The local people studied our drawings carefully, some declared they knew the beast, others were doubtful while some clearly indicated they were thinking of Otters. We did find an Otter slide and 'dining table' under a bridge on the Kimondi stream. Here the otter had been dining on fresh-water crabs. This stream was the camp water supply from which we laboriously, debe by debe, filled 45 gallon drums. This clean water did, however, stain white clothes a yellowish colour ! We asked about Brush-tailed Porcupines and we received the same answer as for the shrew, but no specimens were brought to camp.

In all some 300 small mammals were collected including Potto, Galago, rats, mice, shrews and we were very satisfied with the bats secured in mist nets, 10 species from the tiny Pipistrells to the large fruit bats. Only by working at night could results be obtained so here we have proof of the existance in this forest of nocturnal fauna and an indication of the population. We largely used live traps for the mammals so that unwanted specimens could be freed to continue on their way. We caught both species of Genet, Genetta tigrina at the forest edge and the forest genet, G. servalina well inside the forest.

The bats were taken in mist nets carefully set over water for bats do drink. Rain puddles in the forest tracks were favoured as well as bridges as netting sites.

Snakes, lizards and chameleons were wanted as study specimens and live for the Nairobi Snake Park. Word went out and soon the people responded to the call. A snake would be reported and Peter Kamenya or Ali Hamisi would set out to collect it. Chameleons were brought in, invariably clinging to a long stick and when we grasped the creatures the people gasped in astonishment that we could handle such 'deadly creatures'. Fortune favoured us and there was much excitement when we obtained one specimen of the very uncommon West African 'stumpy-tailed' chameleon, Brooksia, a real find as this extends the range eastwards into Kenya. Two particularly fine snakes were also captured, the Night Adder Causus rhombeatus, now in the Snake Park and also a real giant Egg-eating Snake, Dasypeltis scabra.

Birds kept us busy as we borrowed an expert team of mist net specialists - men who knew how to set up nets and in the most likely places - even well up trees. These nets required regular patrol to remove the captures and ringing, weighing and recording kept the Schifters busy. Over 1300 birds were handled and nearly 600 ringed and we recaptured many of these ringed birds. This indicated a lack of great movement from their territories and also showed that our handling had in no way impaired them. Our first days netting yielded a recapture of a Yellow-whiskered Greenbul which had been ringed near Kapkuto by Tony Diamond in January 1978.

Nets were set for 48 hours continuously on the forest tracks or along traces cut through the undergrowth to the forest streams. We tried to sample all situations over a considerable area. After 48 hours the nets were removed and re-erected on a new track. As a rough calculation (to be verified) we employed some 400,000 foot net hours over 27 days of netting, 100,000 more than at our 1978 site. Results show considerable variation in capture rate, species and numbers of each captured at the two sites. However, many variables can account for the differences - net siting, vegetation type, if near food plants, water present and so on. Some examples follow : (first figure for 1979 the second for 1978) Yellow-whiskered Greenbul 123, 108 Equatorial Akalat 100, 86 Grey-chested Alethe 61, 106 Mountain Illadopsis 54, 40 Red-headed Bluebill 50, 43 Banded Prinea 46, 27 Black-billed Weaver 21, 3. Such figures show how important it is to sample over long periods and at as many different sites before a true picture of the avifauna can be obtained. Some species we took only on ridges and others were confined to valley bottoms.

One of our main concerns was with the breeding seasons of the forest species and this could only be undertaken satisfactorily by examining bodies in detail. We found many species to be breeding while others showed no evidence whatsoever.

As an important side line, whenever possible, thin blood films were made from animals and birds so that they could be examined for the presence of blood parasites. Tape and other worms were also preserved. We noted quite a high infestation rate amongst birds with the parasitic flat fly, Hippobosca sp. and all specimens were collected. All this takes time and we were fully occupied until after dark pinning insects, preserving worms, writing labels, 'fixing' blood films and writing notes. Now remains even more work - examining and determining of all the material at the museum or by specialists outside, for example the Hippobescids may go to the British Museum (Natural History) in London or to Professor Maa in Taiwan ! The field work is over but the lab studies are only just beginning and will take months.

Mike Clifton and others collected insects - all types from mosquitos to beetles, bugs, moths and butterflies. We used a self-catching Malaise trap with success. Mike took his insects with a net, others picked up 'dudus' with their fingers or dug under logs for beetles. Mosquito larvae were collected from puddles and kept in jars until the adults emerged. We found one species hitherto only recorded once from Kenya.

Over the last few days in camp when most of the folk had left, Cecilia Muringo and the writer changed our activities from birds to land snails by day, moths by evening. We dug in forest litter and under rotting logs and stones looking for snails and eventually collected over 200 specimens representing 10 species. This is a very neglected branch of natural history but an interesting one that deserves more attention and does not involve any great energy to undertake.

As we packed up tents soon were spread out to dry and we noted that in the evening the pale coloured tents spread out near a pressure lamp appeared to attract moths. Cecilia and I sat by the lamp, nets in hand, and in no time were popping moths into the killing jar. The next night Cecilia produced her white bed sheet and this was rigged up as a screen behind the two lamps and we made a magnificent haul of moths.

We would like to offer our thanks to all those who made the safari possible: to Vienna for a handsome contribution to costs, the National Museums of Kenya Trustees, the Chief Conservator of Forests, the District Commissioner and Assistant Chief at Chemesia, to Bwana Ezekiel Mwirotsi who came to our aid with a tyre, to the netting team and Tim Barnley, our staff in the field and at the Museum who collected together our tents and other equipment, to the local cook who catered for 17 people a day and the labour who kept our road open and the fires burning and finally to all the local people who brought us specimens. Thank you.

G.R. Cunningham - van Someren, National Museum, Nairobi

DIANI BUSH

Acting on the advise of Leslie Brown in his 'Birds of the African Bush', that the best way to view birds in dense cover is to sit and let them come rather than actively look for them, we had a rewarding time at Diani on the Kenya coast in October 1979.

The bush and forest seemed quiet and bird activity minimal. After several rather fruitless forays into the forest and along bush paths, we altered our tactics. Selecting a suitable patch of bush, we forced our way through the dense scrub, and settled down comfortably under a small tree where there was a clear area below the bush canopy.

The site chosen was a strip of coastal bush, partly _Lantana_, measuring approximately 60 metres north-south and 120 metres east-west. Immediately south was a building site, with a full work force and a compressor working all day. To the east, just 50 metres away, was the local canteen and boat-builders' shed, with frequent comings and goings of pedestrians, cyclists and some cars along the access road 15 metres from our hide. There was thus much noise on three sides, which apparently caused very little disturbance to the birds. Do not be deterred from using a noisy site for watching in this way, if it is otherwise suitable.

Within twenty minutes of sitting down, quite unhidden, a pair of Eastern Bearded Scrub Robins, _Cercotichas quadrivirgata_, were around and remained for nearly half an hour. We have seldom seen this attractive little singer except as a flash of chestnut and white leaving a song patch.

Then, less than 20 metres away, movement caught our eye. It was the Spotted Ground Thrush, _Turdus fischeri_, feeding quietly among the dead leaves. A pair of Red-capped Robin Chats, _Cossypha natalensis_, in our experience difficult to see on account of their skulking habits and ventriloquial singing in the quiet secrecy of this bush site, went about their feeding, with sudden violent interactions with the Spotted Ground Thrush, just as though we were not there.

Repeating the exercise the next day in the same place, we were rewarded with the sight of all three, at even closer range, and an excellent, if brief, view of the Pitta, _Pitta angolensis_. In the course of the hour and a half spent there, we were delighted with the 'sub-song' (if this is indeed what we heard), of the Red-capped Robin Chat - a series of very well performed mimics, linked by characteristic Robin Chat whistles. Watching him singing confirmed his ventriloquial prowess.

Hoping that we might be able to photograph some of these birds, we set up the hide and left it for the birds to accept overnight, doing a little gardening around to open up the area sufficiently. To our delight, the very next morning all four birds turned up, and were totally unafraid of the hide and unaware of its occupants. In addition, we had views of the Grey-backed Cameroptera, _Cameroptera brachyura_, and the Yellow Bill, _Ceuthmocharea aereus_, the latter behaving, on one occasion, like a huge flycatcher, taking an insect on the wing. The Eastern Bearded Scrub Robin came right to the hide and the

Spotted Ground Thrush well within camera range - at this point the camera jammed irrevocably ! The Pitta stayed further out and was very alert and fast moving.

We continued our watching at this site most mornings and occasionally in the evening for two weeks. As might be expected most activity was in the morning. The Red-capped Robin Chats were always around, preferring the deeper shade and denser bush of a very limited area. They rarely ascended more than 1.5 m off the ground. The Spotted Ground Thrush seldom ever left the floor of the bush. The Eastern Bearded Scrub Robin was mainly of the floor throughout the first four days of our watching but thereafter was not seen again and nor did the Pitta return. The Grey-backed Cameroptera made a single visit each morning during the time we were there. He never missed a day, keeping, as we have noted before in other species, to a remarkably regular route, he moved easily through all levels.

All in all, we can thoroughly recommend this method of watching. It brings one into the most intimate contact with birds otherwise seldom seen, and one has the unique experience of being with the birds in their own environment.

- - * - -

THE PALM SWIFT

With the help of Omari, the palm wine collector, the nest, if the minute pad of saliva-stuck feathers can be called such, of the Palm Swift, Cypsiurus parvus, was found 1.6 km south of the cottages at 4. 20' South, on the Diani Beach, Kenya. It contained two chicks, one definitely larger than the other, with early quills showing. Both chicks were contained within the lateral limits of the pear-shaped pad, their little bare backsides resting on the bottom of the pouch-like lower end, which did appear to offer a little support. From time to time both chicks raised their heads to solicit food, but they never, in the two and a half hours we were there, changed their relative positions. The nest was on the underside of a palm frond on the seaward side of the tree. A steady breeze blew the whole time, making the frond, which was about nine metres up, wave considerably.

Having explored the situation, we spent the rest of the evening erecting a platform to raise us up 2.5 m towards the nest. The adult birds left the nest whilst this was going on.

The following morning, with the sun still low, we returned and took up position at the platform, my wife with the mirror to illuminate the underside of the frond with reflected light as required for photography.

One adult bird was at the nest, and took no notice of us either on approach or climbing on to the platform. They must, of course, be very familiar with human beings on this beach. We were about five metres below the nest when photographing.

After half an hour a second adult bird swept in, alighting a few centemetres to the left and slightly above the nest. The sitting bird dropped silently away. The second bird, seemingly smaller than the first, then sidled over to the apex of the nest and fed the chicks, their tiny heads entering well into the bill of the adult, who then slipped down backwards over the nest and chicks, fed them again and once again before settling down to brood. From time to time a minute head would appear between the adult's body and long curving wing, and then disappear again. This smaller bird brooded for only twenty minutes before dropping off to join a second adult which flew past.

Half an hour later the larger adult returned. There had been several approaches by the pair before this one made the nest. They kept up the characteristic squealing calls as they swept to and fro.

Again the same procedure was followed; alighting above and to the left, the preliminary feed followed by a sidling over to the apex, a sliding down over the nest and its quilled occupants, feeding and feeding again, some preening, and finally quiet brooding for half an hour.

Chicks of a much more advanced age have been observed before, completely hiding the nest pad from sight, and maintaining the same side by side position observed in this nest.

Of all the manoeuvers performed in this amazing pattern of nesting, none seem more fraught with danger to the chick than the emergence from the saliva-stuck egg and on to the nest pad without falling. And all the time the palm frond is waving and shaking in the wind. Our brief observation gave us no clues as to how this was done, nor whether the parent bird gave any assistance or support.

The Palm Swift may also be seen nesting in the Doum Palms on the west side of Leopard Rock bandas in Meru National Park.

Dr and Mrs G.C. Irvine, Chogoria Hospital,
P.O. Box 5035, CHOGORIA, Via Meru, Kenya

Members may be interested in the following observation on the development of the young of the Palm Swift, originally printed in the Journal Vol XV, Nos 3 & 4 (68-69), pages 154-170 by R.E. Moreau.

'There is no doubt that the newly-hatched birds are not stuck to the nest pad by the parents as the eggs are. The young have to cling on, whenever thay are not actually being brooded, for the thirty days until they fly; and since on the day of their birth they may be left alone for a couple of hours, considerable muscular effort is demanded of them from the start. In their hanging on they are favoured by being hatched with claws that are unusually well developed, sharp, curved, and fully as long as the toes, and by the texture of the nest, which gives the best possible holding surface. In fact a young Palm Swift about three days old that died of neglect remained dangling by one foot for thirty-six hours.

From within a few hours of birth the muscular activity of young swifts is remarkable. Some are constantly in motion, rubbing their necks and sightless heads together, jerking their rumps and wagging their tail-stumps. Often they fling their heads sideways or backwards, even right onto their shoulders.

These movements have nothing to do with the arrival of food and may be caused by the irritation from the nest parasites. However, one pair when only two and three days old respectively were not quiescent even when being brooded; they occasionally poked a head out from under the parental wing and actually changed places on the nest-pad. At four days old this pair were already to some extent independent of the support of the flange, for one would move up the vertical pad until his body was on a level with the other's head. Older fledglings may be seen crawling up their leaf right off the nest. One got as far as another nest a couple of feet away, where it went into a huddle with the two fledglings belonging there. The reaction of their parents were not seen, but later the wanderer got back to its own nest.'

NOTES ON COLLECTION OF FUNGI

The following notes on collecting fungi have been sent to us from Kew Herbarium. It is hoped that members will collect any fungi they see. At the moment there is no expert on the group at the Herbarium, but specimens can be deposited there for forwarding to Kew for identification.

Only specimens in good condition should be collected. A flat-bottomed basket or open box is useful for the collection of fleshy fungi. Particularly delicate species should be placed in small tins or specimen tubes or loosely wrapped in tissue paper. Parasitic species must be collected with sufficient of the host plant to enable this to be determined as well as the fungus. It is important with agarics to collect the entire fructification, including the base of the stripe and any volva which may be present.

Abundant gatherings of each species should be made if possible, to show stages of development. The habitat should be noted for each collection including associated trees and type of soil. Careful notes of colour (inclusive of colour changes on bruising and of the broken flesh), consistancy, smell and taste should be made when the material is fresh. A water colour sketch of the fresh specimen is desirable to show the form of the fruitbody and a section to show the type of gill attachment.

Collections should be accompanied by spore-prints which are obtained by placing the cap with the gills downwards on a sheet of paper and leaving overnight in a tin or under a glass jar. Spore prints of species with coloured gills should be taken on white paper, but prints of species with white gills should be obtained either on a glass sheet or on black or brown paper. In the latter instance it is often helpful to ring the print with pencil or ink, particularly if the spore deposit is scanty. Many polypores have very short periods of sporulation and their spores have yet to be described, hence spore-prints are particularly valuable.

Specimens should be dried as quickly as possible after collection as this helps to retain form and colour. Polypores are generally easier to dry than agarics but may need to be cut into smaller portions. The larger agarics should also be cut into halves to speed drying. Ideally sucessful and rapid drying requires a flow of warm air (about 40°C) passing over the specimens. This can be obtained by using electric fan heaters or by improvising a perforated tin with a 60 watt lamp beneath a number of wire shelves, in the field a similar perforated tin may be suspended over an oil lamp. In localities with high atmospheric humidity the thoroughly dried specimens must be stored either in a dessicator over calcium chloride or sealed in polythene bags each with a few granules of silica gel. If this is not done they will be ruined by moulds.

Specimens preserved in spirit are sometimes useful to supplement dried material. This is not normally necessary for agarics and for the polypores only small slices are required but all phalloid or clathroid fungi are best preserved as entire fruitifications in spirit.

Kew Herbarium

GOLDEN CAT IN THE ABERDARE FOREST

On Sunday 7th October 1979 I and Mr R. O'Meara of Nairobi were driving along a small forest track near the Karimenu River in the southern end of the Aberdare Forest, Kenya, when we both saw, very close to, what could only have been a Golden Cat, *Felis aurata*.

We had actually driven up the track some three hours previously and on returning my companion saw the cat sitting on its haunches in the middle of the track, perhaps twenty or thirty metres in front of the Landrover. I only saw it after it had jumped up and was dashing into the forest.

It was very reddish-brown in colour and the most prominent feature of the animal was its stockiness.

The Cat was not in view for long enough to confirm whether it had spots on its abdomen nor indeed could one be certain if it had tufts on its ears or not, but Dorst and Dandelot in their *Field Guide to the Larger Mammals of Africa* are adament that the Caracal or Lynx, *Felis caracal*, is found "never in dense forest"and our animal was most certainly much larger than the African Wild Cat, *Felis libyca* which would seem to be the only other cat with which the Golden Cat could conceivably be confused, or perhaps the only largly unspotted cat likely to be encountered at that height (over 2,600 m) in that type of habitat.

It is interesting that this sighting should occur so soon after Ian Hardy's report in the September/October *Bulletin* of his sighting of Golden Cats in the Aberdare Forest.

Rupert W.M. Watson, P.O. Box 40111, NAIROBI

The following short note on Golden Cats by the late Louis Leakey, originally published in the Society's '*Nature in East Africa*' No. 1 of April 1947 may be of interest :

'The Golden Cat which is a wild member of the Cat family attaining the size of a large Cerval Cat, is known to exist in the high forested areas of Kenya but so far only two specimens have been reliably reported and further notes on its occurrence would be greatly welcome.'

OBITUARY. MR H.M. GARDNER

Mr Harold Mence Gardner died on 3rd November 1979.

He was born on November 11th 1189, the son of a Worchestershire farmer. He was head boy at Worchester Royal Grammar school, and later read Botany at Merton College, Oxford (to which he won a scholarship in Mathematics). He took a diploma in Forestry and this was followed by a year's practical training in Germany.

Early in 1914 he joined the young Kenya Forest Department. He volunteered for the East African Mounted Rifles, serving in German East Africa, but later in the war, after a severe attack of malaria, rejoined the Forest Department. In 1920 he married while on leave; his bride Joyce he had known since childhood. In 1925 he became Chief Conservator of Forests and in 1938 was awarded the O.B.E. He retired in 1945.

As befitted his profession, education and surname, H.M.G. was always very interested in plants. Working in the forests and on numerous foot safaris he collected thousands of specimens now preserved at Kew Herbarium and in the East African Herbarium. While chief conservator he enthusiastically developed the Arboretum and later a splendid garden at Windy Ridge which will long be remembered by all who attended garden meetings held there by the Kenya Horticultural Society. For many years Harold was president of the Nairobi branch of that Society. He was also an active member of the Natural History Society for more than 50 years. In our Journal for 1925 there is an article by him on the giant Podocarpus trees near Dagoretti corner. He played a big part in establishing St. Francis Church at Karen and here his ashes are scattered. He was Hon. Treasurer of that church for many years.

Harold is survived by Joyce, three sons, two daughters, 15 grandchildren and one great geandchild. For them we can only wish lives as long, happy and useful as his.

J.B.G.

ANNUAL GENERAL MEETING

The 70th Annual General Meeting of the East Africa Natural History Society will be held in Nairobi on Monday, 10th March 1980 at 5.15 p.m. in the Museum Hall.

Nominations for Office Bearers and members of the Executive Committee as well as notices of matters to be included on the agenda should ne sent to :
The Secretary, East Africa Natural History Society,
P.O. Box 44486, NAIROBI
to reach her no later than Monday 18th February 1980.

Dr F.L. Lambrecht on 'Tsetse Fly Research in the Okavango Swamp, Botswana'.

On 12th November 1979 Dr Lambrecht of I.C.I.P.E. lectured to the Society on various aspects of tsetse fly research with which he was associated in Botswana.

Tsetse flies are a highly successful group of flies adapted to feeding on vertebrate blood. They come into conflict with man because they serve as the vectors of both human sleeping sickness and bovine nagana, caused by various forms of Trypanosoma, a genus of parasitic flagellate protozoa. Ecologically tsetse flies can be arranged into three groups : the 'fusca' group living in deep forest; the 'palpalis' group in riverine forest and woodland and the 'morsitans' group in bushed and wooded grasslands and woodlands. The 'fusca' group have relatively little contact with man or his domestic stock but the 'palpalis' group has much contact with man and is associated with the transmission of a chronic form of sleeping sickness in which death occurs two to three years after infection; the members of the 'morsitans' group are very important vectors of nagana and also transmit a much more acute form of sleeping sickness which causes death in a matter of weeks after infection. Although the two forms of sleeping sickness are so different clinically there are no morphological differences between the causative trypanosomes.

Tsetse flies are slow breeding in comparison with most insects and the female is unique in giving birth, every eight to ten days, to a single full grown larva which at once pupates in loose soil in shady places. Pupation lasts 30 to 40 days so that at any time a substantial fraction of the total population is pupating underground.

Much tsetse fly research consists of regular, systematic sampling of a particular study area in order to discover habitat differences in the species present, population sizes, longevity, feeding preferences and so on. All of these investigations involve the trapping of tsetse flies and Dr Lambrecht showed several slides of different types of traps, telling how knowledge of the flies' behaviour enables more effective trapping methods to be developed. From subsequent recaptures population size, longevity of individuals and the range over which the flies wander can all be estimated: needless to say only when large numbers are marked and subsequently recovered. Other flies are filled and dissected; microscopic examinations of blood in the gut enables at least broad food preferences, or more accurately intakes, to be established while examination of the gut and salivary glands for the presence of trypanosomes provides information about the importance of the flies as vectors of Trypanosoma.

One of the problems being investigated in Botswana was why the incidence of sleeping sickness in the inhabitants of the Okavango Swamp fluctuates so much from year to year. The Okavango is one of Africa's last great wilderness areas and one of its remarkable features is that the water level rises during Botswana's dry season: this is because the swamps are fed from rain falling on mountains in Angola far to the north and are scarcely affected by rains falling in Botswana itself. East Africa has no really comparable ecosystem to that of the Okavango Swamp so Dr Lambrecht's slides showing his boat safari through the swamp were of particular interest. Sometimes the going was easy along broad open water ways bordered by tall reeds or papyrus, at other times a passage had to be forced through reed-beds or the boat dragged through shallows. Camp sites were islands, often forested, or slightly higher land left uncovered by the rising floods. After the safari it seemed likely that one reason for the fluctuating level of sleeping sickness could be differences in the survival of pupae depending on quite small differences in the peak level of the floods around the wooded islands.

A number of other interesting points emerged during question time. Here we learned that Warthog are a favourite 'host' partly because they use the same trails day after day so that flies can rely on a meal by staying near a regular trail; Impala, through having a greater biomass, are a less reliable food source because the herd moves over a larger area by unpredictable paths. Warthogs and reptiles are also favoured because their skin is more or less bare and does no react to proboscis-insertion by violently 'rippling', a well developed response in antelopes that makes feeding difficult for the tsetse fly.

J.F.R.

FOR SALE

C.W. Mackworth-Praed & C.H.B. Grant. *Birds of Eastern and North Eastern Africa.* Series 1. 2 Vols
PRICE Shs 1,600/-
Cave and Macdonald. *The Birds of the Sudan*
PRICE Shs 1,400/-
Brown, L. African Birds of Prey (Collins)
PRICE Shs 60/-
For these three books, please contact the Secretary in the Society's office at the National Museum.

- - * - -

VW Kombi, 1968 Kenya regrestration. Excellent engine completely overhauled in December.
PRICE Shs 20,000/-
Two 2-person back pack tents
PRICE Shs 1050/- and Shs 1125/-
Four shortie back pack air matresses
PRICE Shs 150/- each
Four inflatable pillows
PRICE Shs 30/- each
Bausch & Lomb 200 mm spotting scope, 15 - 60 X (and tripod)
PRICE Shs 1350/-
Vivitar Auto zoom telescopic lens 85 - 205 mm (Pentax mount) with Vivitar 58 mm polarizing filter and cases
PRICE Shs 1,350/-
For the above items please contact Dr Tom Weir, Dept. of Medicine, P.O. Box 30588, NAIROBI or the Secretary in the Society's office at the National Museum.

SOCIETY NOTES

1980 Subscription Renewals

The Secretary would like to thank all those who have already paid their subscriptions. These are due on 1st January and a renewal form is enclosed for those who have not yet paid. We would be grateful if you could inform us if you do not wish to renew your membership. Members who pay by Bankers Order have already been sent a new form to complete, and their membership cards will be sent as soon as notification is received from our bank that these have been paid.

Two Generous Donations

The Society is very pleased to announce that the following two donations have been received :

i) From Mr Arthur Loveridge the sum of Shs 3,200/- 'From their first curator in appreciation of their sending him their publications over the years'. Mr Loveridge now lives on St Helena Island in the Atlantic and has for many years been an active supporter of the Society. Our most sincere thanks to him.

ii) From Dr Anne Spoerry the sum of Shs 500/- to be used towards the Bulletin. Dr Spoerry of the Flying Doctor Society joined us as a life member in 1976 and her generous donation is much appreciated.

Bulletin Copy

The Editor, Mike Clifton has recently received a few comments that the Bulletin does not contain many articles of general natural history interest. We appreciate this, but if you, the member, do not submit copy for publication we cannot give you the type of articles you would like to read. Any member who observes an interesting or unusual incident or who has plant, bird, insect or mammal records is requested to submit them to :

The Hon. Editor, EANHS Bulletin, P.O. Box 44486, NAIROBI

Seasons Greetings

Although a little late, the Chairman and members of the Executive Committee would like to wish all members a prosperous 1980 and we hope for your continued support.

A new Book we hope to sell

The new revised and illustrated edition of the classic work, S.K. Skaife's 'African Insect Life', edited by John Ledger with photographs by Anthony Bannister is now on the market. This excellent work, published by Country Life Books, would be a 'must' for members libraries, and the Society hopes we will be able to supply these at a slightly reduced rate (approximately Shs 250/-) in the near future. Please book your copies through the Secretary, P.O. Box 44486, NAIROBI. A copy will be available in the office for those who would like to see it.

A Member with an Overseas Flat to Let

'Overseas leave flat to let, Sussex Coast, Aldwick near Chichester. Three bedrooms, centrally heated, fully equipped, five minutes walk from the sea, quiet position. Please telephone Nairobi 48834.

Journal Reprint List

It was hoped that a new reprint list could be included with this Bulletin, but due to pressure of work this is not now possible. A new list will be enclosed with the March/April Bulletin. Our apologies to those who were waiting for it.

NEW MEMBERS

Local Full Members

Lt. Col. A.A.J. Danvers, P.O. Box 72643, NAIROBI
Mrs D.S. Duncan, P.O. Box 41774, NAIROBI
Dr Peter A. Huxley, I.C.R.A.F., P.O. Box 30677, NAIROBI
Mr and Mrs Peter Kuester, P.O. Box 47051, NAIROBI
Mr and Mrs William S. Lefes, P.O. Box 30261, NAIROBI
Mr George Luckett, P.O. Box 43561, NAIROBI
Mrs B. Lydall, P.O. Box 44908, NAIROBI
Mr Michel Mesny, French Embassy, P.O. Box 41784, NAIROBI
Mrs Christina Nayes, Colourchem Ltd., P.O. Box 56022, NAIROBI
Mr Rolf Rahders, P.O. Box 44038, NAIROBI
Mrs G.R. Rogalsky, P.O. Box 25209, NAIROBI
Mr and Mrs H. Sanger, P.O. Box 30577, NAIROBI
Mrs J.V. Scriven, P.O. Box 30041, NAIROBI
Mr G.B. Shields, P.O. Box 14345, NAIROBI
Mr J.R.H. Walker, c/o British High Commission, P.O. Box 30465, NAIROBI

Local Life Member

Ian Glenton Marshall, Milnet Estates Ltd., P.O. Box 180, NAKURU, Kenya

Change of Status to Life Member

Dr John D. Gerhart, P.O. Box 41081, NAIROBI

Local Junior Members

Dilip Lakhani, P.O. Box 40140, NAIROBI
Indra Raisinghani, United Nations, P.O. Box 30218, NAIROBI

Overseas Full Member

Dr Renate Scheibe, Wilh.-Schmidt - Str 2, D-8581 Eckersdorf, West Germany.

SOCIETY FUNCTIONS

MEMBERS ARE REQUESTED TO NOTE THAT THERE IN A SOCIETY LECTURE OR FILM SHOW EVERY SECOND MONDAY OF EACH MONTH IN THE MUSEUM HALL, NAIROBI - TIME 5.30 p.m.

Monday 14th January 1980 at 5.30 p.m. in the Museum Hall, Nairobi: Dr O.S. Bamford will give an illustrated lecture on 'High Life in the Cold - Adaptations for living on mountains'.

19th January 1980 and adjoining dates Special offer at 'Adventure Trails Tented Camp'. Please see previous Bulletin for details. Members who have already signed up should note that there will be no refund of money if your booking is cancelled at less than 48 hours notice.

Sunday 10th February 1980 Day excursion to the Harries Farm near Thika, by kind invitation of Mrs C.W.P. Harries. Please meet at the Museum, Nairobi at 9 a.m. sharp and bring a picnic lunch if you wish to stay during the afternoon. Birdwatching & botany in small patches of indigenous forest. There will be some walking.

Monday 11th February 1980 at 5.30 p.m. at the Museum Hall, Nairobi : Mrs J. Rudnai will give an illustrated lecture on 'Snakes for Beginners'

Saturday 16th February 1980 THE ECLIPSE at 10 a.m. For this event the Society has been offered camping facilities at the coast north of Mombasa, in Vipingo and Kilifi in private gardens for the night of the 16th and adjoining nights to make the long joirney worth while. Reservation of camping sites through Mrs A.L. Campbell, P.O. Box 14469, Nairobi. Please fill in the enclosed slip and send it as soon as possible with a stamped addressed envelope. If you intend to camp with a group of friends, please state this, as the camp sites will then be reserved for 2 or 3 tents rather than individually.

7th/8th/9th March 1980 Excursion to 'Bushwhackers Safari Camp' on the Athi River near Kibwezi. Distance from Nairobi 225 km, mostly on tarmac. For bookings please write to Mrs Jane Stanton, P.O. Box 33, KIBWEZI, Kenya. Bushwhackers has self service bandas for 2 or more people at Shs 35/- per person. Preferance will be given to members booking for 2 nights or more. The area is hot and anti-malaria precautions are necessary. Camping is also available.

Monday 10th March 1980 at 5.30 p.m. in the Museum Hall, Nairobi : ANNUAL GENERAL MEETING followed by a film.

4th - 7th April 1980 Easter camping week-end at Eserian/Ngobit by kind invitation of Mr and Mrs J.F. Carnegie. Details in the next Bulletin.

Monday 14th April 1980 at 5.30 p.m. in the Museum Hall, Nairobi Dr Martin Pickford will give a lecture on 'Hominoids and Environments in Western Kenya'.

Wednesday morning bird walks, led by Mrs Fleur Ng'weno continue. Please meet at the National Museum at 08.45 sharp.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J. S. Karmali
Vice Chairman: Dr J. Kokwaro
Editor, Jl E. Africa nat. Hist. Soc. Nat. Mus.: Mrs J. Hayes
Secretary/Treasurer: Miss D. Angwin
Ass. Secretary/Treasurer: Mrs E. B. Angwin
Librarian: Dr J. Kokwaro
Executive Committee (in addition to the above): Miss P. M. Allen, G. C. Backhurst (*Ringing Organizer*), Mrs A. L. Campbell, M. P. Clifton (*Editor EANHS Bulletin*), Dr J. Gerhart, Dr J. M. Mutinga, Dr D. J. Pearson, J. F. Reynolds.
Co-opted Members: Mrs H. A. Britton (*Nest Record Scheme Organizer*), P. Davey, M. Gilbert, Dr A. Hill, J. Maikweki, J. Miskell, M. Mukoko, Mrs F. Ng'weno, D. A. Turner.
Journal Editorial Sub-Committee Mrs J. Hayes, Miss D. Angwin, Mrs V. Balcomb, M. P. Clifton, Dr D. J. Pearson, J. F. Reynolds, Dr A. Hill.
Ornithological Sub-Committee Dr D. J. Pearson, D. A. Turner, G. C. Backhurst, Mrs H. A. Britton, P.L. Britton, Dr A. W. Diamond, Dr J. Gerhart, B. S. Meadows, J. F. Reynolds, D. K. Richards, A. D. Forbes-Watson, C. Mann (London) Dr M. Carswell (Kampala), Dr K. Howell (Dar es Salaam).
Joint Library Sub-Committee (Society representatives) Dr J. Kokwaro, Mrs J. Hayes, M. P. Clifton.
Functions Sub-Committee Mrs A. L. Campbell, Mrs E. B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the *EANHS Bulletin* every two months; a copy of each *Journal* published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes *The Journal of the East Africa Natural History Society and National Museum.* Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (*EANHS Bulletin*), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quarterly bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D. A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment:	Kshs. 750/-
Institutional (schools, libraries) .	annual payment:	Kshs. 70/-
Full Local	annual payment:	Kshs. 70/-
Overseas	" "	Kshs. 70/-
Junior (full-time student, no *Journal* supplied) . . .	annual payment:	Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

H
E135
I
NH

EANHS

BULLETIN

SMITHSONIAN
NOV 14 1987
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

EANHS BULLETIN MARCH/APRIL 1980

CONTENTS

Madagascar 22
Natural History Notes from Kakamega Forest,
Western Kenya. Part 1 27
New Monkey Species Found 35
Rehabilitated Bateleur Eagle 35
Adventure Trails Camp 36
Society Notes 37
New Members 39
Society Functions 40

MADAGASCAR

The Society's trip to Madagascar promised to be excellent; the omens were good, the first being that we caught the Kilifi ferry - it was loaded with some space left and we got on - usually it has loaded and just left ! The journey to Nairobi was without mishap - no punctures nor any other trouble, and the second good omen was on calling to see Don Turner who was in charge of our Madagascar safari, fully expecting to have to pay an extra 10% on our air fares, we were told that it was still the same price to all his clients although the fares had all gone up on the 1st September. We felt after that that nothing could go wrong.

We left Nairobi on Friday, 21st September 1979 exactly on time, at 8.00 a.m., the plane was comfortable and not full and we all tucked into a very welcome breakfast, having had to be at the airport at 6.00 a.m. we were all ready for it. En-route we had splendid views of Mts Kenya and Kilimanjaro, and about 100 miles from our first stop in Madagascar, Nosse Bé we passed over a lovely little island called Isle Glorieuse. The sea was so clear you could see all the coral heads on the reef, and I'm sure the goggling must be marvelous there. Into Nosse Bé where we all got off and cleared Health and Immigration formalities, a long winded process which included an individual check-over in a curtained-off cubicle. A short stop at Majunga, and then into Ivato Airport just outside Tananarive (or Antananarivo to give it its Malagasy name), with just a twenty minute drive into the city itself, all built on hills, to the Madagascar Hilton Hotel, very modern and comfortable.

After a welcome cup of coffee we made our way by very decrepit taxi to the Zoma Market for which Tananarive is famous. We wandered around fascinated until it got cold and dark. This in an interesting market with a wide variety of things for sale, heaps of scrubbed, fresh vegetables, tangerines and mangoes, great mounds of shredded and chopped carrot and cabbage, often mixed up with chopped beans and peas, the stall owners busy with fast chopping knives - how often a bit of finger gets in too I'd hate to think. There were colourful jars of pickles of every variety, with coloured peppers added; things to build a house with, things to put into the house - pots and pans, piles of brightly coloured plastic equipment, clothes - skirts, dresses and children's garments, some of them beautifully hand embroidered in local designs, table linen, crochet mats and lace. Ducks, chickens and turkeys, caged birds, dried fish and prawns, spices etc., all giving off their various odours. Then there were the flower stalls with lovely orchids growing in 'pots' made from the trunk of Tree Ferns, Cyatheaceae, lots of different succulents, numbers of a peculiar looking swollen root called Pachipodium which sprout a mass of little yellow daisy-like flowers; various potted ferns, pails full of cut flowers, huge gladiolus and a mass of other colourful flowers.

Then we went along to the permanent stalls built up around the outside of the market square. They had a wonderful array of straw hats, we all bought one for a few francs. There were brightly coloured baskets of every shape and size, wood carvings, musical instruments and an enormous variety of haberdashery, with piles of buttons of every shape and colour.

(How I have searched Nairobi and Mombasa for buttons - and then when faced with huge mounds like that I had no idea what to buy, so bought nothing !). We had had no lunch so during our wanderings we bought tangerines and bananas which we ate as we walked, we looked longingly at beautiful deep red strawberries, but they were much handled and fly-walked so we decided against them, mouthwatering though they were. We tried a slice of a very peculiar looking square 'sausage', about 75 cm long and 9 cm wide, covered in leaves and bound with string; it was a creamy colour with a brown centre and tasted smoked and sweetish, from what we could make out it was basically tapioca. One could spend hours wandering and looking, but be warned - thieves and pickpockets are everywhere and we were all 'bumped'. However, having been warned we had taken precautions, one of our group had put his money in his sock where it was quite safe though a bit difficult to get at when needed, and caused much laughter. At other times two members of the group had their handbags slashed with razor blades from the back and money pulled out from the back, they were clutching their bags but never felt a thing. We later felt that the men in the party were bumped repeatedly to turn their attention from the females being 'done'.

The next day we went into town again, this time to look at and buy stones. There were beautiful ashtrays made from a variety of semi-precious stones, many I had never heard of, but the most eye-catching were the solitaire boards filled with polished balls cut from all the different stones - pinks, brown, yellows, greens and black, a few clear quartz, but most were blotched or streaked, ranging from the size of small marbles to billiard balls. They were not expensive, though were heavy for air travel. Someone had given me an egg made from petrified wood, so I collected some more in Madagascar.

In the afternoon we went off to the Zoological Gardens in taxis - quite hair-raising, we fairly slammed on all anchors and came to a sudden halt when the taxi in front of us had a sudden puncture - how we did not hit him I'll never know.

The Zoological and Botanical Gardens are one, so most of the trees and plants were named. It was all very dry, very little was in flower, the aloes were over and the seed dispersed or we would have smuggled a few out. The various lemurs were interesting, they are attractive little animals with their soft fur and long tails which they wrap around themselves, presumably to keep warm when resting, often in pairs cuddled together. We saw several species which I will not list, but will rather keep names for the ones we saw in the wild state. We saw a Fossa, the largest carnivore on the island, a sad animal he was, dull brown all over and rather like a very large mongoose, with a long body and tail and short legs. On the small ornamental lakes we saw the Malagasy Kingfisher Alcedo vintsioides with a black beak. There was a lot of Squacco Herons, Ardeola ralliodes, some Black-crowned Night Herons, Nycticorex nycticorex, some Madagascar Squacco Heron Ardeola idae, and Madagascar White-eye, Zosterops maderaspatana. I was disappointed in the birdlife there, but the park was full of humans - not really a haven for the wild birds who can no doubt do better elsewhere. The one bird that was of interest, unfortunately in a cage that was far too small, was the Madagascar Fish Eagle, Haliaetus vociferoides. He was very tame

~~and responded to the children's~~ teasing by calling - a call much like that of our local Fish Eagle, *Haliaetus vocifer*, but it seemed to lack the last note. He had a white tail, and otherwise was brown with a little white on his face, not nearly such a fine looking bird as the Fish Eagle of Kenya, but perhaps in his wild state he is better looking and not quite so bedraggled.

Ferns, palms and succulents in the park were interesting, but the whole place seemed to be neglected and untidy, in great need of someone to really care for it and give it a thorough clean-up and in some cases, water. There is a small museum with an exhibit of endemic birds which was interesting, a few skeletons and very little else.

We visited a nursery specialising in exotic indigenous plants. There was an exhibit in the Hilton Hotel with pachipodiums in flower, we thought we would like to see more. The Nurseryman whose Malagasy name was almost impossible to pronounce, being very long, we simply called him Alfred. His main nursery was 18 kilometres out of town, we did not have time to visit it, but the nursery he had built up in the tiny plot that was his home was filled to capacity with an incredible variety of plants in pots and tins - one had been in his family for five generations ! He had a few indigenous orchids in flower, but more interesting was his collection of pachipodiums and succulents. These can be ordered and he will pack them up for you. He can also issue an Export Permit to get them out of Madagascar, very important as they are very strict indeed about the export of their plants and stones - you need a permit for everything. This all makes one feel nervous when you are taken into the cubicles to be searched on your way out !

On the way back from the plant nursery we wound our way up the highest hill to the Queen's Palace. We did wonder if our elderly taxi would make it with four of us and the driver, but it did - just. The Queen's Palace is now a Museum with a lot of historically interesting exhibits and data, beautiful old jewellry, very old weapons, and Malagasy architecture. The view from the top of the hill was splendid from all sides and we were surprised at the amount of rice fields that seemed to be everywhere on the low lying land where there were no buildings. There did not seem to be any shortage of water in Madagascar, and there were rivers and streams winding round in the valleys when you looked down from the aeroplane, as well as lots of small dams, lakes and swamps, except, of course in the desert areas to the south.

After an excellent lunch at the airport we flew off to Tulear in the southwest of the island, and from there a 30 km drive over a dusty road took us to the Moramora Beach Hotel. An evening walk found several endemic birds including the Malagasy Nightjar, *Caprimulgus madegascariensis*, who sat on our roof calling far into the night. Moramora is rustic, the food is superb and the friendly Ring-tailed Lemur *Lemur catta* family were enchanting, with a five-day old baby who clung to his mother and peered out with tiny beady eyes. They were very tame indeed and very photogenic, particularly if you have a banana or a mango, as we had. They played on the rafters in the dining room at night and stole the bread, or took it from you with gently hands, then they fell asleep in a heap, high up on a rafter, with their long tails wound round one another.

In the morning we went out to the reef goggling. Unhappily a lot of the corals were dead, though new life was creeping in. My french was not quite good enough to follow exactly what had originally killed the corals, but we gathered that the great disturbance was caused by a cyclone. In the deeper sea around the 'malango' we saw a lot of fish but the sea was pretty cold down there, and without a wet suit you could not stay in the water very long.

That afternoon we went on a very long birdwatching walk with Don Turner and saw a lot of 'new' birds. You do need someone with you to identify them, and what better person than Don. The walk was long and tiring as it was all in soft sand through the most unfriendly bush I have ever walked in. The Dideirea scrub is all prickles, everything there has spines or hooks of some kind. There was a lot of baobabs looking like great brown bottles, they seemed very much more evenly shaped than ours on the E.African coast, but no-one knew the latin name for them.

All too soon we had to fly back to Tanarive because the flight schedule had been changed - we all agreed that we would have liked at least another day at Moramora - but not another night - they really had the most uncomfortable beds I have ever tried to sleep on !

Our next excursion was to Perinet, or Andasibe as it is now known, though the Station still proudly carries the name Perinet. We went by train, our own choice and not to be recommended. No first class seats left and the 2nd class could not be booked in advance. We arrived at the station at 5.00 a.m. for 7.00 a.m. departure; the queue stretched almost out of sight, so we walked through as if we were going to go first class, jumped the queue and climbed on. We ended up with two lots of two seats between the six of us, but we wedged in by standing passengers and small children, fortunately beautifully behaved. We were at least able to take turns sitting down, or we could all squeeze up tight. The journey took six hours, and you could really see very little as on one side you were hemmed in by humans and the railway was dug into the hillsides in a lot of places. The route wound its way up and round mountainous country, and the journey should have been very enjoyable. Our accommodation was in the Hotel dela Gare, which was in the station itself but upstairs, very basic with ancient iron (hospital type) double beds, the bolsters were of straw and the bedding, though clean, was mostly holes; it was a lot worse when we had finished with it I fear, every time you turned over a toe got caught up. Our bed had an outward lean, with a high centre and we spent most of the night trying not to fall out; our neighbours' bed was the other way round, they kept landing up in a heap in the middle.

Our guide here was Michel, a young Malagasy, and he was excellent, hand-working, friendly and anxious to please. He was very well up in his knowledge of birds and orchids and knew most of their latin names. We walked miles during our 3½ days stay there, either straight up or down hills with an occasional flat bit along the furrow or road. It is all indigenous forest, with very little in the way of prickly undergrowth so you could walk away from the paths. Here we saw a lot more endemic birds, including the spectacular and beautiful Blue Coua, Coua caerulea.

We searched the hills for the Indiri Lemur, Avabi laniger, it is the largest of them all, black and white and tail-less. I think Michel took us on an endurance course the first afternoon we were there and he was surprised that we all made it home - only just in my case. This prepared us for the early morning search for the Indiri. They sing regularly in the mornings, a strange, sad song which echoes round the hills - a long drawn-out high-pitched "oooooooooooh", the various families call to each other from the trees on the hilltops: an eerie, echoing sound. Unfortunately, I never saw one but others in our group of six did. We found a troop of Fulvus Lemurs, Lemur fulvus, on our last day, brown ones with long tails. Four of them were high up on the branch of a tall tree, all cuddled up together and several others were leaping around, they talked in a series of grunts.

In the forest we found a lot of lovely ferns, various Asparagus, very tall Travellers Palms, Ravenala madegascariensis 12 to 15 metres high, and several beautiful orchids. As it was very dry little was in flower although a lot of the trees were covered in buds just waiting for the rain to come. Maybe the parties who went later saw the flowers.

On the second morning we were called to the Forestry Office on our way back from our walk, there they had caught a Madagascar Boa Constrictor, Constrictor madagascariensis, and thay had it in a glass box: a dark, shining, beautifully marked snake about two metres in length. We were not at all sure what they were going to do with it, they denied that it was going to the Zoological Gardens, maybe they just ate it.

Time flew, and our stay in Perinet came to an end, this time we travelled back to Tananarive in very comfortable cars on good roads. The day before we left we had watched one hundred Russian tractors being driven past the station, having come from Tamatave on the east coast, presumably going to Tananarive. Of course, we caught up with this slow moving convoy on the one bit of road that was all bends and hills and it took an age to inch our way past them - they seemed to go on and on, with many fallen by the way - they boiled on the long climb. On this drive it was brought home to us how quickly the Malagasy people are destroying their country by cutting down all the forest. Whole hillsides were being cut and burnt, and in some areas they were re-planting with fast growing gums, in others they were planting crops and terracing the hillsides, making rice paddies on the lower flats. The future for the forest lemurs and birds does not look promising, particularly as we were told the lemurs were very good to eat.

On our way back, on the outskirts of Tananarive we were taken to a small lake on private land which has been made into a bird sanctuary - Lake Alarobia. There is an island in the middle on which were the biggest collection of birds I've seen for a long time. Various egrets and herons, including Squacco, Ardeola ralliodes, and the Madagascar Squacco which were in full breeding plumage and displaying beautifully. A mass of Fulvous Tree Duck, Dendrocygna bicolor, White-faced

Tree Duck *D. viduata*, Comb Duck, *Sarkidiornis melanota*, and Red-billed Teal, *Anas erythrophynchos*, were swimming around near the island and paddling along the edge.

On our last day we went for a long drive out to Manjakatompo, past farms and through villages - many of the houses in Madagascar are very attractively built with red mud plaster and were double storied. We went all the way up a large hill planted with pines to Manjakatompo, we climbed higher and higher until the bus began to boil, when we were able to get out and walk and give it time to cool down, the views were splendid. We climbed back into the bus and went down to the small town of Ambatolampy where we had the most excellent lunch at the "Chez Marsellais", the owner/chef being a Frenchman. It was a very ordinary looking restaurant, but the food they served made the long dusty journey well worth while, the speciality of the house was a beautifully cooked and spiced fresh water crayfish - one each. We all took so long eating that we had to go flat out to get back in time to pick up our luggage and get to the airport, still in our dusty clothes with scarcely time to wash our hands and faces. We needed the full two hours at the airport to get through - the crowd was quite frightening, a Jumbo Jet holds a lot of people, every seat was taken and the Malagasy people all had huge families to see them off. At Ivato Airport you have a really thorough check out. All luggage is examined in case you have any stones or plants not on your permits, your cases are thoroughly untidied and very difficult to shut, your money is checked out carefully and all spent had to be accounted for, then you finally go into the little cubicles to be frisked. Being in a group and put through by one of Michel's friends on the airport staff we did better than most people, but we were hot and tired and very glad to be off, to sit in comfort and to be fed yet again.

Ours was the first of three trips arranged: I hope the others were as successful as ours. I see from Don Turner's check list that the last group saw more species of lemur and also more birds than we did, but there were many more of them. Our personal count was 26 endemic species and 44 other species of birds. A most enjoyable and interesting trip, and our thanks go to Don Turner and Michel for all their hard work and patience, to our companions in our small group of six who made it all such fun, as well as the other ten, though we did not see very much of them; and last but not least, to the E.A. Natural History Society who made it all possible for us to go. May they please think up some more such trips in the future.

Anne V. Donnelly, P.O. Box 420, MALINDI, Kenya

NATURAL HISTORY NOTES FROM KAKAMEGA FOREST, WESTERN KENYA

Part 1: Mammals, Birds and Lepidoptera

In January 1980 Eileen Angwin, Jean Hayes, Mike Clifton and myself undertook a safari to Kakamega Forest in western Kenya. Our object was to obtain first hand information on the state of the forest and to compare this to knowledge gained on previous visits some years previously.

As many members are probably aware, Kakamega Forest is unique in Kenya, being the only West African type forest remaining. Many of the birds, mammals, insects and plants are found no where else in Kenya and thus are under threat from the destruction of their habitat.

We left Nairobi on 7th January and drove to Kakamega via Nakuru, Kericho, Muhoroni, Chemilil, Nandi Hills, Kapsabet and Kisieni. The journey took us 9¾ hours (with a stop for lunch) in a heavily laden Volkswagon Kombi. This route is on tarmac roads, exept for the last few kilometres into the forest; the roads are excellent with the outstanding exception of the section to Nakuru. Being loaded as we were, the Nandi Hills escarpment reduced our speed considerably and we decided that this was not the quickest route to be recommended if one is in a hurry.

A booking had been made to stay in the Forest Department Rest House but no confirmation had been received. Luckily it was not occupied and the rooms were soon opened to us. The rest house is still incomplete and we gathered that this will be the case for some time. The old rest house, a charming one storied cottage, was burnt to the ground about four years previously and the Forest Department then started on an ambitious project to rebuild a double story wooden house rather on the 'Treetops' style. This will have parking underneath, while the four bedrooms are reached by a strange, not to say dangerous, flight of stairs. The rest house faces the nature reserve and has a long but narrow verandah protected by a high wooden railing, this unfortunately cuts off the view of everything but the treetops. Bathrooms have been planned, one behind each bedroom, the baths are unconnected and there is no running water in the rest house. Outside, on the lawn, a stand pipe exists but this produced very little water; this has to be obtained in a jerry can from the nearby Forester's house. There is a modest charge for the rest house (Shs 15/- per person per night) and this can be booked through The Chief Forester, Kakamega Forest Station, P.O. KAKAMEGA.

Immediately behind the rest house is the Kakamega Nature Reserve. On my previous visits to the forest this was in a very poor state with cattle feeding in the reserve and human interference conspicuous. Trees had been felled and the vegetation cut about. A vast improvement was seen on this trip with no disturbance noted. However, it was of interest that comparatively few birds were seen in the nature reserve. There were several fig trees in fruit but these did not seen to attract the birds. Two mist nets were erected just behind the rest house on the grid path, these were up for four days and the total catch was 6 Yellow-whiskered Greenbuls, a Banded Prinea and a Long-horn Beetle ! I can only assume that many visitors have netted on this one track and the birds avoid it.

Mike Clifton noted that the nature reserve was much improved as far as insects were concerned. A large proportion of the dead trees were being left to rot (in the past they were collected), in consequence there had been a rise in insects which feed on dead wood. Also the increase in the undergrowth has lead to a steep rise in butterfly numbers, only one or two species have shown a drop - these are detailed on the list. One species of butterfly, Abisara neavei, one of the Judies, has had a population explosion and several specimens were seen on each walk in the reserve. The food plants of the African Judies are still unknown and although we kept a careful watch on several females we failed to find out what it was. It was thought that there must be a link between the state of regeneration of the undergrowth and the increase in this previously rare butterfly, but more work will have to be done on this.

During our five night stay in Kakamega Forest we spent the majority of the time in the nature reserve and every morning took a walk down to the pump house. This track, which is directly opposite the road to the Forester's house, was most rewarding. On one side of the path are very tall Eucalyptus trees which are gradually being felled, while underneath them is thick secondary growth cut by logging tracks. Many species were recorded here. On the other side of the track is good secondary growth with some indegenous trees, again, well worth watching. The track to the pump house itself, on the left beyond the Eucalyptus is scenically beautiful and in one place one is looking down on the tree tops. In the river at the bottom I have in the past seen the White-spotted Crake but we were not so lucky this time. Good stands of the pink flowered Impatiens stuhlmannii were growing in the river, this plant is only recorded from Kakamega and Yala.

On our last two nights in the forest we ventured further afield in the vehicle and visited both the Lugusida and Ikuywa Rivers, the latter being an especially good bird locality. To reach the Lugusida River, join the main road and turn east for about two kilometres. Here a large road on your left leads to the river, about a kilometre from the turning. Plantation forest lines the road on one side while there is bush near the river. Here, some years previously, a Shining Blue Kingfisher was recorded - naturally we saw no sign of it. However, the river valley is most attractive and well worth a visit. We spent some time watching a pair of Grey-throated Barbets with a nest hole in a dead Eucalyptus tree.

To reach the Ikuywa River return to the main road and continue eastwards for a further five kilometres until the narrow single lane bridge is reached. This area is particularly good in the evening, but children watering cattle can be a nuisance; they leave around 5.00 p.m. However, a warning - sand flies Simulium sp are extremely numerous and man-eaters ! I was extensively bitten and the resulting itch was intolerable for five days. Members visiting the Ikuywa are advised to arm themselves with a potent fly spray and face the consequences ! We have always found this an excellent bird locality and it was here that the White-spotted Crake was heard while both Grey Parrots and Great Blue Turacos came to roost there is the late evening.

Driving back to the rest house in the dark we kept a sharp look out for Potto and Palm Civet but were unsuccessful as we lacked a spot-light on the vehicle. Potto, being slow moving are easy to spot by their red eyes and are rewarding to watch. They are reported to be moderately common in the trees along the edges of the main road.

MAMMALS

Sun Squirrel *Heliosciurus* sp. One seen close to rest house each day while checking the mist net. Flame red in colour.

Blue Monkey *Cercopithecus mitis*. Small troop which followed Colobus every day in their forage through the nature reserve.

Colobus Monkey *Colobus abyssinicus*. Troop of about 13 individuals, including 3 half-grown young, calling at dawn every day and seen of their forage which lead right past the rest house.

BIRDS (nomenclature after Backhurst and Backhurst, order after Mackworth Praed and Grant whose bird number preceedes each species)

(65)Hadada Ibis *Bostrychia hagedash*. 3 at Ikuywa River.

(132)Black Kite *Milvus migrans*. Overhead near staff quarters.

(142)Wahlberg's Eagle *Aquila wahlbergi*. One at Ikuywa River.

(147)Crowned Hawk Eagle *Stephanoaetus coronatus*. Heard calling high over forest, call copied by Snowy-headed Robin Chat.

(149)Long-crested Eagle *Lophaetus occipitalis*. One on pump house track.

(235)White-spotted Crake *Sarothrura pulchra*. Heard at Ikuywa R.

(312)Common Sandpiper *Tringa hypoleucos*. One at Lugusida River.

(313)Green Sandpiper *Tringa ochropus*. One at Ikuywa River.

(386)Red-eyed Dove *Streptopelia semitorquata*. Several near Ikuywa River.

(394)Tambourine Dove *Turtur tympanistria*. Heard regularly particularly on the pump house track.

(395)Blue-spotted Wood Dove *Turtur afer*. Heard many times throughout the forest, presumably this species.

(416)Emerald Cuckoo *Chrysococcyx cupreus*. Heard.

(432)Hartlaub's Turaco *Tauraco hartlaubi*. Heard at Ikuywa River.

(437)Great Blue Turaco *Corythaeola cristata*. Heard on 10.1.80 at Ikuywa River; 11.1.80 six birds roosting there, much calling.

(442)Grey Parrot *Psittacus erithacus*. 5 birds roosting at Ikuywa River.

(479)Striped Kingfisher *Halcyon chelicuti*. Heard at Ikuywa R.

(481)European Bee-eater *Merops apiaster*. About 20 birds overhead.

(486)White-throated Bee-eater *Merops albicollis*. Several at Ikuywa River and overhead at pump house.

(494)Blue-headed Bee-eater *Merops muelleri*. Two birds hawking from tall trees on sides of main road through forest.

(500)Black and White Casqued Hornbill *Bycanistes subcylindricus*. Common in forest, flock followed Colobus Monkeys on forage.

(509)Crowned Hornbill *Tockus alboterminatus*. Three near Lugusida River in plantation forest.

(533)African Wood Owl *Ciccaba woodfordii*. Calling from Nature Reserve between 19.30 and 20.00 hours only.

(566)Speckled Mousebird *Colius striatus*. Several at Lugusida R.

(570)Narina's Trogon *Apaloderma narina*. Heard every day on pump house track, presumably this species.

(586)Grey-throated Barbet *Gymnobucco bonapartei*. Pair at Lugusida River, nesting in hole in dead Eucalyptus tree.

(597)Golden-rumped Tinker Bird *Pogoniulus bilineatus*. Commonly heard in forest, presumably this species.

(604)Yellow-billed Barbet *Trachyphonus purpuratus*. Commonly heard on pump house track and three birds seen.

(632)Yellow-crested Woodpecker *Mesopicos xantholophus*. One at pump house.

(639)Scarce Swift *Apus myioptilus*. Many at Ikuywa River - dusk.

(650)African Broadbill *Smithornis capensis*. Heard commonly in forest but would not come to call on tape recorder.

(691)African Pied Wagtail *Motacilla alba vidua*. Three birds round rest house each day.

(693)Cape Wagtail *Motacilla capensis*. One at Ikuywa River.

(742)Dark-capped Bulbul *Pycnonotus barbatus*. Common and vocal.

(746)Bristle-bill *Bleda syndactyla*. Several birds on pump house track, particularly in thick secondary growth.

(770)Joyful Greenbul *Chlorocichla laetissima*. Very common and calling continually by day.

(776)Yellow-whiskered Greenbul *Adropadus latirostris*. Six netted in nature reserve and commonly seen in forest.

(822)Wattle-eye Flycatcher *Platysteira cyanea*. Commonly heard the forest and several seen.

(826)Yellow-bellied Wattle-eye *Platysteira concreta*. Heard several times in forest, would not come to play-back on tape recorder.

(827)Blue Flycatcher *Trochocerus longicauda*. Several birds seen often with a mixed bird party.

(832)Paradise Flycatcher *Terpsiphone viridis*. Several birds seen including a male in the white form. Often with mixed bird parties.

(849)White-tailed Ant Thrush *Neocossyphus poensis*. One on pump house track and another at Ikuywa River.

(887)Grey-winged Robin Chat *Cossypha polioptera*. Regularly heard but not seen.

(889)Blue-shouldered Robin Chat *Cossypha cyanocampter*. Heard several times but would not come to play-back on tape.

(892)Snowy-headed Robin Chat *Cossypha niveicapilla*. A bird in very good voice near rest house which gave a superb dawn song each day.

(898)Equatorial Akalat *Sheppardia aequatorialis*. One seen very well at pump house and several heard.

(925)Garden Warbler *Sylvia borin*. Several in secondary growth on pump house track.

(973)Grey Apalis *Apalis cinerea*. One small party seen on pump house track.

(977)Black-collared Apalis *Apalis pulchra*. Small party on pump house track.

(1011)Grey-backed Cameroptera *Camaroptera brachyura*. Commonly seen and heard particularly in secondary growth.

(1029)Chubb's Cisticola *Cisticola hunteri chubbi*. Many heard in secondary growth and several birds seen.

(1048)White-chinned Prinia *Prinia leucopogon*. Very common and vocal particularly on the pump house track.

(1049)Banded Prinia *Prinia bairdii*. One mist netted in reserve.

(1053)Black-faced Rufous Warbler *Bathmocercus cerviniventris*. Commonly seen and heard; always very low in undergrowth.

(1054)European Swallow *Hirundo rustica*. Many at Ikuywa River.

(1065)Striped Swallow *Hirundo abyssinica*. Many at Ikuywa River.

(1075)Black Roughwing Swallow *Psalidoprocne pristoptera*. Several birds at dusk at Ikuywa River.

(1080)White-headed Roughwing Swallow *Psalidoprocne albiceps*. Several birds at dusk at Ikuywa River.

(1086)Grey Cuckoo Shrike *Coracina caesia*. One in mixed bird party.

(1087)Velvet-mantled Drongo *Dicrurus adsimilis coracinus*. Several seen on pump house track.

(1110)Mackinnon's Shrike *Lanius mackinnoni*. One bird in a cultivated field at start of pump house track.

(1127)Luhder's Bush Shrike *Laniarius luehderi*. Several seen and heard throughout forest.

(1132)Pink-footed Puff-back Shrike *Dryoscopus angolensis*. One in mixed bird party in nature reserve.

(1134)Brown-headed Bush Shrike *Tchagra australis*. One near pump house.

(1141)Grey Green Bush Shrike *Malaconotus bocagei*. Two birds in mixed bird party in nature reserve.

(1167)Black-headed Oriole *Oriolus larvatus*. Heard regularly on pump house track, maybe this species.

(1219)Common White-eye *Zosterops abyssinica*. Several small groups seen, normally with a mixed bird party.

(1256)Northern Double-collared Sunbird *Nectarinia preussi*. One male on pump house track, maybe this species or the Olive-bellied Sunbird ?

(1266)Green-headed Sunbird *Nectarinia verticalis*. One male.

(1269)Olive Sunbird *Nectarinia olivacea*. One only feeding on bottle brush tree.

(1271)Collared Sunbird *Anthreptes collaris*. Pair regularly seen around rest house.

(1300)Grey-headed Sparrow *Passer griseus*. Two at Ikuywa River.

(1335)Dark-backed Weaver *Ploceus bicolor*. Fairly numerous on pump house track and occasionally in nature reserve.

(1351)Brown-capped Weaver *Ploceus insignis*. Several pairs seen often with mixed bird party. Very 'tit-like' behaviour.

(1358)Grosbeak Weaver *Amblyospiza albifrons*. Male with rich chestnut head and throat in mixed bird party at rest house.

(1378)Bronze Mannikin *Lonchura cucullatus*. Many small parties regularly seen in *Solanum* bush near rest house.

(1380)Black and White Mannikin *Lonchura bicolor poensis*. One small group only.

(1391)Red-headed Bluebill *Spermophaga ruficapilla*. Male and female seen on main road through forest.

(1424)Black-headed Waxbill *Estrilda atricapilla*. Two birds.

(1462)Thick-billed Seed-eater *Serinus burtoni*. Two on pump house track.

LEPIDOPTERA

(This list of butterflies follows that of Peter's '*A Provisional Check-list of the butterflies of the Ethiopian Region*' 1952, with a few modifications. This list was chosen as it is the latest publication to give all the butterflies commonly met with in one uniform list. A tremendous amount of change has taken place in the names of African butterflies and it would be absurd to change the names of some of them when they are known and leave others which may be doubtful, thus creating confusion. Until another check list is produced Peter's will have to remain the standard. The English names are all from Williams '*A Field Guide to the Butterflies of Africa*' 1969. A number of the species in this list are not mentioned by Williams.)

PAPILIONIDAE

Papilio dardanus dardanus Brown. Mocker Swallowtail. Only two seen, usually very common.

Papilio zoroastres joiceyi Gabriel. Several seen.

Papilio phorcas ruscoei Bryk & Krüger. Green-patch Swallowtail. Common.

Papilio bromius chrapkowskii Suffert. Broad Blue-banded Swallowtail. Only two seen, usually very common.

Papilio demodocus Esper. Citrus Swallowtail. Common.

PIERIDAE

Belenois raffrayi extendens Joicey & Talbot. Raffray's White. Only one seen but usually very common.

Belenois calypso minor Talbot. Quite common on the *Vernonia* flowers along the forest paths. Not on the *Vernonia* flowers outside the forest.

Leptosia wigginsi Dixey. This was confused with the following species in the forest and so it is not certain how common it actually was.

Leptosia alcesta Stoll. African Wood White. All the specimens collected were of the form *nupta* Butler, which is sometimes considered as a seperate species. Very common in the undergrowth.

Colotis elgonensis elgonensis Sharpe. Elgon Crimson Tip. Only one seen.

Eronia pharis Boisduval. Uncommon.

Eurema hecabe brenda Doubleday & Hewitson. Common Grass Yellow. Common in open areas.

Eurema brigitta brigitta Cramer. Broad-bordered Grass Yellow. Common in open areas.

DANAIDAE

Danaus chrysippus Linn. African Monarch. Two seen, one of the form *dorippus* Klug and the other of form *alcippus* Butler.

Danaus formosa mercedonia Karsch. Beautiful Monarch. Common, particularly in the nature reserve near the Forester's house.

Amauris niavius niavius Linn. Friar. Common in the forest, particularly in the nature reserve.

Amauris tartarea f. *psyttalea* Plötz. Monk. Very common.

Amauris hecate Butler. Dusky Danaid. One seen.

Amauris albimaculata interposita Talbot. Layman. This is very like the next species and to check the species about 40 were netted, identified and released. Only three were this species.

Amauris echeria contracta Talbot. Chief. Very common.

SATYRIDAE

Bicyclus miriam jeffreyi Fox. Uncommon.

Bicyclus dentata Sharpe. Quite common.

Bicyclus smithi Aurivillius. Common particularly around the cultivated bamboo near the Forest Headquarters.

Ypthima granulosa Butler. Very common in the grassy areas, particularly in the large open areas in the forest.

Ypthima albida Butler. Common round forest edges.

NYMPHALIDAE

Charaxes fulvescens monitor Rothschild. Quite common.

Charaxes candiope candiope Godart. Green-veined Charaxes. Seen occasionally.

Charaxes pollux pollux Cramer. Black-bordered Charaxes. Common, particularly in the early morning on fermenting sap on a tree opposite the balcony of the rest house.

Charaxes plione bebra Rothschild. One on dog droppings.

Charaxes etheocles evansi van Someren & Jackson. Black Forest Charaxes. One on dog droppings.

Cymothoe lurida butleri Grunberg. Very common but never seen on previous visits.

Cymothoe herminia johnstoni Butler. Never very common, two seen.

Cymothoe sangaris hobarti Butler. Blood Red Cymothoe. Never common, three seen.

Euryphura plautilla albimargo Joicy & Talbot. Quite common.

Bebearia sophus audeoudi Riley. Several seen.

Euphaedra rex Stoneham. Normally very common but only a few seen.

Euphaedra medon fraudata Thurau. Never seen before this visit when one seen. Obviously very common in the '30s from the number in the Museum's collection.

?*Euphaedra eleus coprates* Druce. Orange Forester. Normally very common, only one seen. ?Species correct?

Aterica galene gelene Brown. Forest Glade Nymph. Common on forest paths.

Pseudoneptis coenobita bugandensis Stoneham. Never very common but a few seen on this visit.

Neptis saclava saclava Boisduval. Small Spotted Sailer. Moderately common.

Neptis alata Overleat. Quite common.

Neptis melicerta melicerta Drury. Very common.

Neptis woodwardi woodwardi Sharpe. Quite common, flying low along forest paths.

Cyrestris camillus camillus Fabricius. African Map Butterfly. Quite common, particularly around damp patches on paths.

Asterope garega garega Karsch. Quite common in damp patches.

Byblia acheloia acheloia Wallengren. Common Joker. Several seen in the grasslands.

Ariadne pagenstecheri Suffert. Occasionally seen.

Neptidopsis ophione ophione Cramer. Common along edges of clearings.

Eurytela hiarbas lita Rothschild & Jordan. Pied Piper. Common.

Apaturopsis cleocharis Hewitson. Painted Empress. Seen occasionally at damp patches.

Hypolimnus misippus Linn. Diadem. Only found in very open areas. Two forms of the female seen, the normal one and form *inaria* Cramer.

Hypolimnus monteironis Druce. Black-tipped Diadem. One female only seen.

Hypolimnus dubia mima Trimen. Variable Diadem. Only one female seen, but probably confused with *Amauris tartarea* of which it is a very good mimic.

Salamis temora Felder. Blue Salamis. One seen, normally very common.

Salamis parhassus Drury. Mother of Pearl. Several seen, usually quite high and with a lovely floating flight.

Precis stygia gregorii Butler. Very common in the forest.

Precis terea algiva Hewitson. Soldier Commodore. Common amongst the undergrowth at the edge and inside the forest.

Precis archesia Cramer. Garden Inspector. Only two seen.

Precis octavia sesamus Trimen. Gaudy Commadore. Only one seen on the form *sesemus* Trimen.

Precis sophia Fabricius. Little Commadore. Common in open areas

Precis westermanni jordani Aurivillius. Blue-spot Commadore. Common in the open areas, where the female is easily confused with the last species.

Precis oenone oenone Linn. Blue Pansy. Very common in the open areas.

Vanessula milca Joicey & Talbot. Orange and Brown. Very common in shaded areas.

Phanta columbina columbina Cramer. Dusky Leopard. Moderately common in the forest.

Dennie Angwin, P.O. Box 14166, NAIROBI

NEW MONKEY SPECIES FOUND

The following article was first published in the Tanzanian 'Daily News' on 14th December 1979 :

'A new sub-species of monkey has been sighted in a mountain forest near Kilombero sugar estates in Morogoro Region by two University of Dar es Salaam scientists, it was announced in Dar es Salaam yesterday.

A statement released in the city yesterday by the University said the sighting by the two scientists, K. Bulstrode and W.A. Rodgers was made during a survey of primate populations of the Uzungwe mountains in Kilombero District.

The local people know the monkey as Ngolaga in Kihehe or Makakos in Kipogolo. This is the first time in more than 50 years that new primates have been recorded in Tanzania.

It is also the first time crested mangabey have been recorded in the country.

According to the scientists, the monkey has already been identified as a sub-species of the mangabey (Cercocebus galeritus). Its nearest relatives are found in small patches of forests in north- east Kenya. Other related subspecies are, however, also found in Gabon and Zaire.

The two scientists attested that although in many features including shape, size and posture and calls, the monkey resembles its Kenyan relative, there are clear differences in colour and facial markings "which justify describing the Kilombero population as a new distinct sub-species".

The sighting of the monkeys by the scientists has underscored the fact that little is known about the biological resources of Tanzania's forest, although of course the Ngolaga or Makakos has been known to the local people all along.

The Acting Director of Forestry in the Ministry of Natural Resources and Tourism, Ndugu Sowe said that the sighting gave added weight and publicity needed for forest conservation in Tanzania.

He also called for increased research into all aspects of forest biology in the country.'

REHABILITATED BATELEUR EAGLE

An adult female Bateleur Eagle, rehabilitated, taught to fly and kill again (after a massive snake bite in February 1978) was released back into the wild from Rombo campsite in Tsavo West National Park on 15th February 1980. As she has lost her fear of man she may well visit camps in this area of Tsavo. Any sightings of an apparently tame and tolerant female Bateleur would be gratefully received. She has small leather bands on each leg, plus a steel numbered ring.

All information to Peter and Grete Davey, P.O. Box 15007, Nairobi, or the Bird Room, National Museum, P.O. Box 40658, Nairobi.

ADVENTURE TRAILS CAMP

In January 1980 the Society held a weekend function at Adventure Trails Camp. This was a most enjoyable weekend. Adventure Trails is a tented safari camp situated 40 km south of Maralal in the scenic Samburu country. The road from Thomson's Falls is murram and rough in places but the 290 km journey from Nairobi was well worthwhile. The atmosphere of the camp is friendly, in comfortable tented accommodation with homely good cooking and good service.

The camp offers many activities:- guided walks for bird watching and game stalking can be arranged in the company of an experienced professional hunter. A leisurely camel ride in the last hour before sunset into the surrounding countryside was unforgettable in more ways than one ! Horse rides are also available. Leopards are baited regularly a short way from camp but although we waited breathlessly from behind the protection of a stone wall for over half an hour, the leopard was not to be seen. Another feature of the camp is spotlight after dinner drives through the bush surrounding the camp. The night drive on the 19th was particularly successful and many animals rarely seen during the day were observed by means of a spot light mounted on the roof of the land rover. Many animals were seen including a Serval Cat, Felis serval hindei, Bat-eared Fox Otecyon megalotis virgatus, a Side-striped Jackal Canis adustus notatus, and a herd of sedentary Reticulated Giraffe, Giraffa camelopardalis reticulata, and Bush Babies. The particular highlight of the drive was the sighting of an Aard-Vark Orycteropus afer lademanni, close to the vehicle. It was rather mesmerised by the spot light, so was in full view for three or four minutes. It was interesting to note that the eyes of the Aard-Vark appeared deep red in the light.

One morning a group left the camp at 6.30 a.m. accompanied by one of our hosts. Only 50 metres from the camp the fresh spoor of a large leopard, Panthera pardus, was seen. The group followed game tracks through the bush for several kilometres, but despite seeing the spoor of a wide variety of animals, the only animal sighted that morning was an Eland, Taurotragus oryx pattersonianus. The lack of bigger game was more than compensated for however, by a fascinating encounter with the Greater Honeyguide, Indicator indicator. Its harsh and at times very noisy call was first heard in a valley about two kilometres from the camp. As the group got to within 100 metres of the bird, which was perched on a conspicuous branch of an olive tree, it flew off and waited, all the while calling noisily, until the party came closer to the new perch, at which time it flew off yet again. This process was repeated four times until the Honey-guide led the group for almost a kilometre. Finally it perched on a branch of another olive tree and was completely silent. Taking the cue that the honey was somewhere near, our guide soon found a hole in a nearby tree in which bees were active. The Honeyguide flew off soon afterwards. Substantial claw marks of the Honey Badger, Mellivora capensis sagulata, were also observed around the bark of the tree near the hive.

Later that morning the group returned to the tree together with a local tribesman employed at the camp. He quietened down the bees with smoke from smouldering twigs and widened the hole to allow access to the honey. Three combs were found inside the tree, only one of which had a substantial amount of honey in it. Some honey was left in the fork of the tree to repay the Honeyguide for services rendered, and the group retired to a respectable distance to await the possible return of the bird for his reward. Surprisingly it was a Scaly-throated Honeyguide, Indicator variegatus, which arrived at the tree a few minutes later and in the process of two trips removed the pieces of comb from the tree. It was a wonderful opportunity to witness the relationship between man and bird.

Some members explored the Karisia Hills, situated about 50 kilometres from the camp and 10 kilometres east of Maralal. The road out of Maralal climbs quite steeply up to about 2,500 m and passes through beautiful stands of huge Podo trees Podocarpus sp. It was disturbing however to see that felling of these massive trees, which must be hundreds of years old, is taking place. In some cases a path of destruction had been cut through the forest to gain access to a single large tree. Discussion with the men felling the trees revealed that they have an arrangement to supply cut timber to individuals in Maralal. It is certain that if this distruction continues unhindered, this forest, an oasis of green surrounded by semi desert will soon be lost. The opportunity was taken by a small group to visit Losiolo, 16 km north of Maralal, to see the spectacular views of the rift valley.

Other excursions from the camp were to nearby dams where a large variety of birds were observed. On the way to one of the dams, a very noteworthy observation was the sighting of a pair of Swallow-tailed Kites, Chelictinia riocourii, which was clearly seen hovering about ten metres above the ground. These birds are rarely seen, being a rare resident species in northern districts of Kenya.

Lists of birds seen during the weekend and compiled by participating members are available at the E.A.N.H.S. Office.

Molly I. Keating, Veterinary Research Laboratory,
P.O. KABETE, Nairobi
&
Chris Foxall, Kenyatta University College,
P.O. Box 43844, NAIROBI

SOCIETY NOTES

Annual General Meeting The 70th Annual General Meeting of the East Africa Natural History Society will be held on Monday, 10th March 1980 at 5.30 p.m. in the Museum Hall, National Museum, Nairobi.

Skaife's African Insect Life edited by John Ledger with photographs by Anthony Bannister should be available in the very near future. Members who have already ordered this excellent book will be informed, and those who have not yet placed their orders are requested to do so through the Secretary in the Society's office.

News from Longmans A straight reprint of the classic work, African Handbook of Birds, Series 1 Birds of Eastern and North Eastern Africa, Volumes 1 and 2 by C.W. Mackworth Praed & C.H.B. Grant is being undertaken. The books are illustrated with many line drawings and colour plates and give an introduction to each family, a key to species and the scientific and English names. Included are original references, general and local distribution, habitat, habits, nest, eggs, times of breeding, diet and call.

These very useful books will be available very shortly and can be ordered from usual retail booksellers or through the Society.

Vol 1. 836 pages. Expected price £25 nett.
Vol. 2 1179 pages Expected price £30 nett.

If sufficient copies are ordered through the Society we hope to be able to offer our members a discount of these prices. Please place your orders NOW with the Secretary in the Society's office or write to P.O. Box 44486, Nairobi. Expected in about six weeks time.

Eclipse I'm sure many of our members undertook safaris to eastern and south eastern Kenya to view the eclipse on 16th February 1980. Many observations must have been made of various creatures and plants - we need these observations, however minor. The Society is planning to publish all results either in the Bulletin or Journal. Please send your notes to the Editor, P.O. Box 44486, Nairobi.

Library A note to remind new members that we have a very good Africana library housed in the National Museum. Members may borrow non-reference books for a month. Your membership card must be shown to the Librarian when taking books out. Hours are weekdays 8.30 a.m. to 12.30 p.m., 2.00 p.m. to 5.00 p.m. Saturday mornings 9.00 a.m. to 12.00 noon.

Bird Walks Wednesday morning bird walks continue, led by Mrs Fleur Ng'weno. Please meet in front of the National Museum at 8.45 a.m. sharp. Walks normally last about 3 hours.

Journal Reprint List We had hoped to be able to include a new reprint list of articles in our Journal. Unfortunately, due to pressure of work this has not been possible, but we promise this will be sent out with the next issue.

'Life on Earth' Thanks to the kindness of Mr Alan Root, the Society has been offered all 13 parts of this wonderful television series. We have decided to show this to members of both the Natural History Society and the Museum Society, starting of Monday 17th March and running every Monday until 16th June with the exception of Easter Monday, 7th April. Members who have paid their annual subscription have already been sent a seperate notice of this. Bookings are still being accepted, entry by season ticket, price Shs 130/- per adult for the series, children Shs 70/- per child for the 5.30 p.m. showing. Hope to see you in the Terrace Room, Nairobi Serena Hotel. Books relating to the subject of the series will be on sale at special discount prices, so bring your cheque book !

NEW MEMBERS

The following new members have been elected to the Society.

Local Full Members

Mrs S.M. Boulton, P.O. Box 44597, NAIROBI
Mr Tom Boulton, Dept. of Botany, P.O. Box 30197, NAIROBI
Mr and Mrs R.L. Bowker, P.O. Box 41221, NAIROBI
Mr Bruce Buckland, P.O. Box 71, ISIOLO, Kenya
Mr Pater Calamai, P.O. Box 50891, NAIROBI
Ms Moya Chase, P.O. Box 30345, NAIROBI
Mr and Mrs J.L.K. Coldwell, P.O. Box 30274, NAIROBI
Mr I.F. Corvin, P.O. Box 14748, NAIROBI
Miss E. Davie, P.O. Box 30333, NAIROBI
Mr John David Edgerton, British High Commission, P.O. Box 30465, NAIROBI
Mr J.R. Grieves-Cook, P.O. Box 40075, NAIROBI
Mrs Allison Herrick, P.O. Box 30261, NAIROBI
Miss C.B. Heywood-Jones, c/o British Council, P.O. Box 40751, NAIROBI
Miss Susan Huke, P.O. Box 72444, NAIROBI
Ms P.M. Johnson, c/o Applecross Trust, P.O. Box 47384, NAIROBI
Mrs Mina Maoz, P.O. Box 44472, NAIROBI
Mrs Vera de Meester, c/o T.P.I.P., Private Bag, KILIFI, Kenya
Mr David C. Moyer, P.O. Box 77, SUBAWANGA, Tanzania
Miss Julia Ann Odom, Chumani Harambee Sec. School, P.O. Box 52, KILIFI, Kenya
Mr David A. Petrie, P.O. Box 50, KIAMBU, Kenya
Mr and Mrs Pinney, P.O. Box 57046, NAIROBI
Mr G.L. Rickards, P.O. Box 43077, NAIROBI
Mrs I.K. Sale, P.O. KILIFI, Kenya
Mr and Mrs Richard M. Sears, c/o Kenya Canners Ltd., P.O. Box 147, THIKA, Kenya
Mr and Mrs W.F. Shadel, American Embassy, P.O. Box 30137, NAIROBI
Prof Adrian Strain, Faculty of Commerce, P.O. Box 30197, NAIROBI
Mrs C.J. Thornton, P.O. Box 2, NANDI HILLS, Kenya
Dr J.W. Thorsell, P.O. Box 30481, NAIROBI
Dr and Mrs White, Kakamega High School, P.O. Box 90, KAKAMEGA, Kenya
Mr D. Whitecross, British High Commission, P.O. Box 30465, NAIROBI
Mr David Wood, P.O. Box 68234, NAIROBI

Local Junior Members

Alkesh A. Dave, P.O. Box 40715, NAIROBI
Mr Alfred K. Kambe, c/o Dept. of Zoology, P.O. Box 30197, NAIROBI

Overseas Members, Institutional and Full

Bibliotheque Universitaire du Rwanda, B.P. 54, BUTARE, Rwanda.
Museum of Natural History Research Library, 90007 Exposition Blvd., LOS ANGELES, Ca 90007, U.S.A.
Thomas Pincelli, 275 Brompton Rd., BUFFALO, New York 14221, U.S.A.
S. Thomson, Windsor Hall, The Royal Gardens, Windsor, Berks. U.K.
J. Stanley Turner, 'Greenfields, Fulford, York, England.

SOCIETY FUNCTIONS

7th/8th/9th March 1980 Safari to Bushwhackers Safari Camp near Kibwezi. Please see the previous Bulletin for details.

Monday 10th March 1980 at 5.30 p.m. in the Museum Hall, Nairobi, ANNUAL GENERAL MEETING followed by slides from Madagascar by Members.

Monday 17th March to Monday 16th June 'Life of Earth' series to be held in the Terrace Room, Nairobi Serena Hotel. For details please see page 38.

4th to 7th April 1980 Easter weekend camp. Camping at Eserian Ngobit by kind invitation of Mr and Mrs J.F. Carnigie. Camp will be 50 kilometres west of Nyeri. Bird watching and botanising in the lovely surroundings. Members should be completely self contained with all food and equipment. Water will be available. Please bring sufficient petrol for excursions and return journey to Nyeri. Weather permitting it is intended to make an excursion into the Aberdare Forest. Members wishing to take part in this excursion should please fill in the enclosed slip and return it with a stamped addressed envelope to Mrs A.L. Campbell, P.O. Box 14469, NAIROBI before 22nd March.

Monday 14th April 1980 at 5.30 p.m.in the Museum Hall, Nairobi Dr Martin Pickford will give an illustrated lecture on Hominoids and Environments in Western Kenya.

Monday 12th May 1980 at 5.30 p.m. in the Museum Hall, Nairobi Dr Norman Myers will give an illustrated lecture on Tropical Rain Forests. A Global Heritage in decline.

Sunday 18th May 1980 'Dudu Crawl' led by Mike Clifton. Please meet in front of the National Museum, Nairobi at 9.30 a.m. and bring a picnic lunch if you wish to stay all day. The dudu crawl will take place close to Nairobi.

Monday 14th July 1980 at 5.30 p.m. in the Museum Hall, Nairobi Dr Alan Hildrew will give an illustrated lecture on The Natural History of Temporary Rain Pools.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

H
135
E
H

EANHS

BULLETIN

SMITHSONIAN
NOV 1 4 1991
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

CONTENTS

Some Observations on Anomalures near Chemesia, Kenya . . .42
A Case of Mammal/Bird Mutualism: or 'Horning In' 44
Hunter's Haretbeest in Tsavo Park. 46
An Overburdened Bat. 46
Strange Diet for a Jackal 46
Swallow-tailed Kites Breeding at Porr, Lake Turkana . . .47
A Year's Bird Watching in Kenya 49
Observation of a Pair of Pygmy Falcon at their Nest . . .51
Observation on a Pair of White-bellied Tits 52
Random Bird Notes. .52
A Venturesome Puff Adder 53
Natural History Notes from Kakamega Forest, Part 2 54
The Vegetation and Land Use of North Mau Escarpment . . .55
The Names of East African Podocarpus species 56
Directions for Mida Creek, Kenya Coast 57
Obituary. Professor Arthur Loveridge 58
"A Guide to the Wild Flowers of Kenya" 59
"Birds of East Africa" 59
Wanted and Lost. 60
Society Notes. 60
New Members 61
Society Functions .62

SOME OBSERVATIONS ON ANOMALURES NEAR CHEMISIA, NORTH NANDI, KENYA

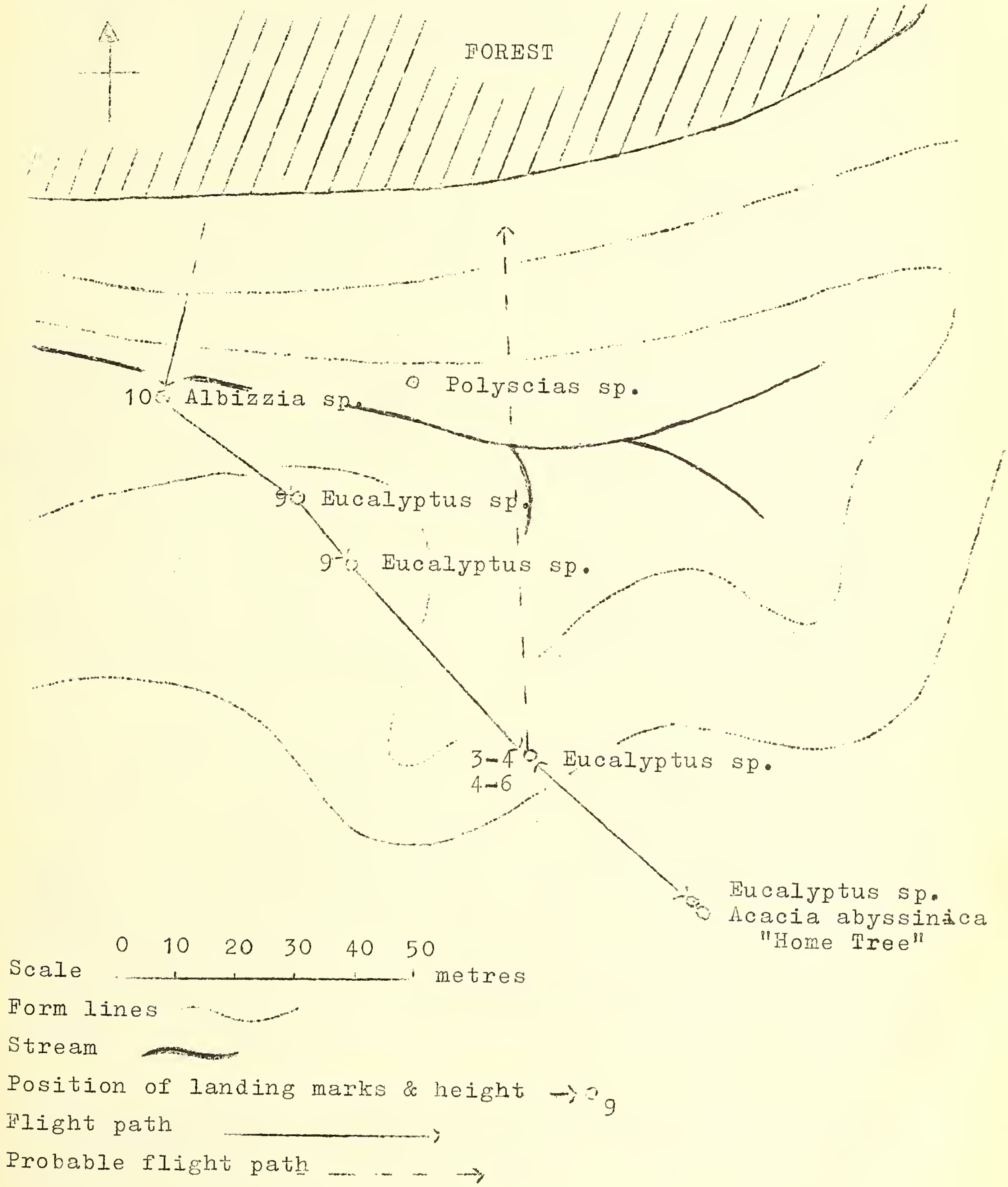
In the course of a joint National Museum of Kenya/Vienna Museum expedition to the North Nandi Forest in November 1979, two anomalures.(or flying squirrels), Anomalurus derbianus jacksoni De Winton, a female and its newly weaned young male, were found living in the hollow trunk of an Acacia abyssinica some 125 metres outside the forest and along a fence dividing a maize field from a grazing paddock. The hollow in the tree trunk extended between two holes in the side, one at a height of 3.5 m above the ground and the other 2 m above that. A thin stick thrust upwards through the lower hole which caused the animals to emerge from the higher one and scuttle up the tree and along a branch extending westwards past a Eucalyptus tree. Further intimidation induced them to launch themselves into the air and glide smoothly down a hill to low down on a tall eucalypt and promptly climb up it. They did not go further than this in the day time, and upon being left alone returned home.

Unlike its close relative A. derbianus cinereus Thomas of miombo woodland in Tanzania, Jackson's anomalure is a forest animal, and it must be unusual to find it in this sort of situation. Because of this, and because a particularly fine opportunity seemed to present itself, we were determined to try to observe something of the behaviour of these two as they emerged of their own accord in the evening. In this we were disappointed, as we sat some way off with field glasses and torches from late afternoon until well into the night without seeing a sign of them. No doubt they were extremely wary after much disturbance throughout the day - not by us, but by the local children. Close examination of the trees, however, showed distinct, near vertical, scratch marks made by the sharp curved claws of these animals where they had landed at the end of a glide. These occured in distinct patches indicating that the same route to and from the forest was used night after night. This route was traced by carefully examining all the trees in the neighbourhood (apart from in the forest where the high undergrowth made it impossible to search the trees from the ground) and is shown on the accompanying map, which was made with the aid of a hand bearing magnetic compass and normal walking paces corrected to metres. Unfortunately we had no instrument with which to measure slopes.

They must have set out from the 'home tree' as we had seen them do when chased in the daytime, and the landing marks appeared between four and six metres from the ground on the smooth trunk of the tall Eucalyptus. None of the trees outside the forest bore landing marks facing this tree, so the animals must have climbed very high up (the hight of the tree measured on a photograph from a distance was 47.5 m) and from here glided across the valley directly into the forest, the edge of which was 95 m away. The return route was very clearly marked: emerging from the forest they landed on the vertical trunk of an Albizzia, from here to the trunk of a eucalypt, then to a large horizontal branch of another eucalypt, then to low on the trunk of the very tall eucalypt. From the tall eucalypt they glided to the eucalypt growing adjacent to the

Acacia, most landing marks being at a height of 12 metres. On the map is marked the position of a very important Polyscias sp. which, surprisingly, was not used.

We have followed Kingdon 1974 'An Atlas of East African Mammals' in using the name anomalure rather than the more common "flying squirrel" because, among rodents, anomalurids could hardly be further removed from squirrels. The term would be more acceptable were it not for the fact that true "flying squirrels" do exist in the palaearctic and nearctic regions.


FOREST
10 Albizzia sp.
Polyscias sp.
9 Eucalyptus sp.
9 Eucalyptus sp.
3-4
4-6
Eucalyptus sp.
Eucalyptus sp.
Acacia abyssinica
"Home Tree"
0 10 20 30 40 50
Scale
metres
Form lines
Stream
Position of landing marks & height
9
Flight path
Probable flight path

Alex MacKay and G.R. Cunningham van Someren,
Division of Natural Sciences, National Museum of Kenya

A CASE OF MAMMAL/BIRD MUTUALISM:

OR 'HORNING IN'

During the course of a study on Dwarf Mongoose, Helogale sp. behaviour in the Taita/Teveta district of Kenya, I was able to obtain some interesting observations on cooperative feeding behaviour between Dwarf Mongoose and a variety of birds, expecially Hornbills.

The study area was fairly dense Commiphora scrub. Four hornbill species occured here, the Grey Hornbill, Tockus nasutus, Yellow-billed, T. flavirostris, Red-billed, T. erythrorhynchus and Von der Decken's, T. deckeni. The Grey Hornbill was never seen to take part in the mutual foraging excursions but the latter three species were almost continually present. Preliminary results show that, of a total of 150 hours of mongoose activity, 62% were spent foraging and, of this, 86% was in the company of Yellow-billed Hornbills, 91% von der Decken's and 93% Red-billed Hornbills. The dominant species (from its ability to remain nearest the mongooses and drive off other species) was the Yellow-billed, the von der Decken's took second place while the smaller Red-billed a fringe position.

The hornbills seemed to be feeding mainly on grasshoppers which the mongooses flushed for them as they moved through the grass. Although their size and clumsy movements (especially on the ground and in thick scrub) would be thought to preclude any great success in catching the flying insects, the hornbills proved very adept at this, even turning somersaults in the air after a flying locust and coming up with the insect in their beaks. One mongoose group under observation was accompanied by two babies approximately 2 months old which were still begging food from the adults, running after the animal which had caught something and trying to take it out of its mouth. The Yellow-billed Hornbills were also seen on several occasions to attempt the same thing, even to the point of picking up a baby mongoose that was in the way and flinging it to one side !

The relationship between the mongoose and hornbills was, however, not purely one-sided. Dwarf Mongooses usually leave a guard at some vantage point when the rest of the group is foraging. When a group, especially if it was a small one, was foraging with the hornbills, however, a guard was rarely posted, the hornbills taking over this function, thus allowing all group members to feed, the mongooses responded immediately to the birds' warning call. Apart from this, mongooses which had foraged away from the main group and had thus lost sight of them, were regularly observed to climb onto the nearest high object from which they could see the hornbills flapping in the grass and then dash away towards the group of birds.

The association between the hornbills and mongooses was not simply an accidental one, the hornbills being attracted by the sight of locusts jumping and just joining the mongooses once they had started foraging. This was especially true of the Yellow-billed and von der Decken's Hornbills. The birds would sit in trees near the termite mound the mongooses were sleeping in (usually a different one each night) in the early morning and wait until the mongooses emerged. Two observations, especially, made this deliberate association obvious. In one case, the morning was overcast, it was drizzling intermittently and the mongooses had still not emerged from the mound by 09,30 Hrs. A pair of Yellow-billed Hornbills had been waiting in a nearby tree since 08.40 finally flew over to the mound, peered into the holes and croaked loudly several times. The mongooses emerged about a minute later and set off foraging within 10 minutes. In the second case, similar behaviour was observed from a male von der Decken's Hornbill after a delayed start to the afternoon foraging excursion.

If the mongoose group had young, the hornbills foraged most frequently in the company of the adult mongoose which had the babies in tow, probably because this larger unit (individuals forage singly otherwise) covered a larger area and, in addition, the babies were more inept at catching grasshoppers than more experienced adults. If two mongoose groups happened to meet, the birds would go off with the larger of the two, thus area foraged was an important factor.

Other bird species were also seen to take part in the mutual foraging community but did not play the prominent role the hornbills did. The most regular attendants were Drongos, Dicrurus adsimilis, (88% of total foraging time) and White-crowned Shrikes, Eurocephalus anguitimens, (56%). Helmet Shrikes were uncommon participants, only joining in if they happened to be in the vicinity. Quite large parties of birds could form, the largest number observed at any one time being 2 pairs of Yellow-billed Hornbills, 3 pairs of von der Decken's Hornbills and 3 pairs of Red-billed Hornbills, 2 Drongos, 5 White-crowned Shrikes and 6 Helmet Shrikes, a total of 29 !

A Shikra, Accipiter badius, was observed to attempt to 'get in on the act' on many occasions but without success, the mongooses and birds scattering and hiding as soon as it stooped. I thought a Grasshopper Buzzard, Batastur rufipennis, was also trying to catch locusts in the same way but after I saw it swoop on a mongoose baby and bowl it over I realised that it was after other game. Its presence in one of the nearby trees would almost always result in the mongooses 'freezing' and warning and the hornbills flying into trees. The mongooses made no response, however, to hornbills (approximately the same size as the Grasshopper Buzzard) gliding in to join them or to the group of birds fluttering and flapping about them as they foraged. They seemed to be relying on the hornbills in such situations to warn them if the approaching bird was friend or foe. Their dependence on the hornbills could be determined by the fact that if a male hornbill took vocal offence at another pair of the same species joining the group, the mongooses would all dash for cover.

Such an association for mutual benefit appears to be learned and may even be seasonal, depending on prey abundance. I would be very interested to hear if anyone has made similar observations with Dwarf Mongooses, especially in other habitats.

Dr Anne Rasa (until mid-April P.O. Box 49, VOI, Kenya)
Lehrstuhl f. Tierphysiol., Univ. Bayreuth,
858 BAYREUTH, W. Germany

HUNTER'S HARTEBEEST IN TSAVO PARK

On safari recently in Tsavo East National Park, Kenya, we took the route 106 to 164 which is marked Balguda on the map. There, mixed with a herd of Kongoni and Zebra we saw three Hunter's Hartebeest or Hirola, Damaliscus hunteri.

According to Dorst and Dandelot in their Field Guide to the Larger Mammals of Africa this animal may only have a population of 1000 head, most of which inhabit Kenya. John Williams in his book A Field Guide to the National Parks of East Africa states that in recent years a small herd has been introduced into Tsavo, south of the species normal range.

It is good to know that at least three have survived and we wondered if there is anymore up to date information on the size of the herds in Tsavo and the general population.

Also on the same trip we had the good fortune to see up to three hundred elephants congregating on the Galana River east of Crocodile Point. Smaller herds were all converging on the area travelling at great speed with a definite purpose. Is it a habitual migration and what purpose could it have ?

Rita Poxon, P.O. Box 43963, NAIROBI

AN OVERBURDENED BAT

A short time ago, we found a bat, which we think was a Yellow-bellied Bat, Scoto philus nigrita, lying on the floor in the house. When we looked at it closely we noticed that it had twin babies clinging to its underside. It flew off quite happily and did not seem to be hurt, so we concluded that the double weight of the babies had perhaps caused it to make a forced landing.

Is it common for this species to have twins ?

Mr & Mrs N.W. Nicholson, P.O. Box 259, MBEYA, Tanzania

STRANGE DIET FOR A JACKAL

About 4 p.m. on 22nd January 1980 in Nairobi National Park, we came upon two Silver-backed Jackals, Canis mesomelas, playing in the road. As we approached, one, not quite grown, retreated into the grass and sat looking at us. The other, a young adult female, let us approach and park on a little bridge right by her. She sat looking up at us quite curiously and, we thought, quite hungrily. I threw a last piece of shortbread to her which she ate greedily. She then came right up to the car door and looked up inquiringly.

"Louise, do you think she'd eat banana ? It is all we have left."

"No way," said Louise (Fordyce), "will she eat a banana. Jackals want meat."

Anyway, I threw a banana to the jackal and, to our surprise, she gobbled it down. Piece by piece she ate the whole banana and looked up at us as if asking for more ! So, I took the second banana, cut it into small pieces and put them on the low concrete bridge abutment and on the ground by the car door. She ate every last bite ! At one point, she went to the grass by the ditch and dug briefly, and several times she went underneath the culvert and came out the other side. On closer observation, however, we couldn't see anything.

We do know that one should not feed the animals in the national parks. But, if we hadn't, we would not know that jackals like bananas !

Finally, it was interesting to note that there was an unusually large number of secretary birds in Nairobi National Park. Any reason ?

Dorothy Cobb, P.O. Box 41259, NAIROBI

SWALLOW-TAILED KITES BREEDING AT PORR, LAKE TURKANA

On 12th April 1979, we watched several pairs of Swallow-tailed Kites, Elanus riocourii, soaring and hovering over an old 'colonial' nesting site at Porr, on the eastern shore of Lake Turkana, Kenya. We had observed these nests in May 1978 but it appeared that nesting had been finished at that time as we saw no breeding activity although we did see the birds themselves, at least 20 individuals. In 1979, approximately one month earlier, we returned in the hope that we would find them breeding, and the results are noted below.

There were two distinct 'colonies' about 4 - 6 km apart, in identical habitats, even to the trees used as nest sites. The first group had two active nests, and the other, one. The nest structures were almost identical in every case, constructed on lateral branches, of small twigs and sticks sparsely lined with fine grass, approximately 30 to 40 cm wide with a deep cup, deep enough to make it impossible to see into the nest at eye level. In both colonies the birds used Balanites sp as nest sites, ignoring the much täler Acacia tortilis readily available only a short distance away.

The area contained a number of old nests, used in previous years but it appeared that the nesting birds this year made new nests, at least two old nests we saw the previous year were not being used again. No active nest was higher than 3 metres above ground, the lowest was barely 2 metres, even though the bushes themselves were much higher than this, about 4 to 5 metres in height.

Group 1 2 active nests plus two other pairs of birds

Nest 1

12th April 1979 Female (?) sitting, flew away on our approach. We inspected the nest and found it not yet complete, no grass lining had yet been added. Site about 2.5 m up in bush.

13th April Bird again sitting, we watched from about 25 m for 40 minutes, she re-arranged small twigs constantly and added new ones broken from the nest tree, but she remained sitting the whole time - at no time did she stand during this period.

Male bird (smaller) appeared overhead, circled the nest site once, landed about 50 m away, picked up a small dead twig, and flew directly to the nest. The female stood up to greet him, spread her wings and took the twig directly from his beak. Both birds uttering shrill twittering calls during this period.

He flew off, landed about 25 m away, picked up another larger twig, took off, soared with it, dropped it, and returned to the nest with nothing. The same 'twittering-wings lifted' display took place.

14th April Female observed sitting, we did not disturb her.

19th April Female sitting, she flew off as we approached. We saw a single egg, almost oval, clear white with deep red spots, unevenly, and sparsely, scattered all over.

Nest 2 Situated about 100 m from nest 1, in the same species of bush, about 2.5 m up on a lateral branch.

13th April Female sitting, we watched the male bring food from a distance but were too far away to see exactly what it was. He appeared to drop it on the nest and left immediately. We inspected the nest at close range and found three young chicks, all of similar size, black beaks and eyes, covered in pale grey down, all were still very small and feeble.

18th April Brief inspection of nestlings, all stronger and more active, two of them had grown larger than the third.

Group 2 One active nest, three other pairs of birds.

Nest 3

18th April Nest in *Balanites* but only 2 m above ground. (A large seasonal (dry) river ran only about 100 m away, with many large *Acacia* trees along its banks, but we saw no nests in any of them).

Nest structure identical, again on a lateral branch with virtually no shade.

Inspection showed four young chicks, two of them markedly larger than the others. They were all more active than those in nest 2. Black beaks, shiny black beady eyes, covered in soft pale grey down.

19th April Using the car as a hide we parked about 7 m away from the bush at about 08.00hrs. Female left the nest as we approached and circled above. At 08.15 she returned, perched on top of the nest bush briefly, hopped onto the nest and settled down to brood, occasionally 'titivating' the nest by rearranging the twigs. 08.40 the male appeared overhead and landed in an adjacent bush about 50 m away, carrying what appeared to be a small lizard in his claws. He fed briefly, eating the head of the lizard, then he flew straight to the nest. Landing on the edge of the nest, he raised his tail partly, 'twittering' excitedly, transfered the lizard to his beak, the female rose to meet him, uttering the same twittering sounds and took the lizard directly from his beak. The male remained briefly, sitting on the edge of the nest, then flew off. The female fed on the lizard, eating the intestines by holding the lizard in

her talons and pulling bits off, the smaller pieces she fed the nestlings and ate the larger herself, finishing by swallowing the whole tail.
She left the nest shortly after to soar with the male. Other pairs joined them until there were 8 birds overhead, all of them seemed to keep up a fairly constant twittering between the pairs. We waited until 09.30 but she did not return.

Peter and Grete Davey, P.O. Box 15007, NAIROBI

A YEAR'S BIRD WATCHING IN KENYA

When I arrived in Kenya in November 1978 I was informed that any attempt to become au fait with the birds of East Africa would entail a two-year apprenticeship. I knew that I would be resident in Eldoret for approximately a year; and set myself a personal target of 300 birds, in the event achieving 344 (list submitted to the Editor, List B), of which no less then 286 were lifers ! I am aware that this is 'tick-listing' at its worst, but surely recognition is the only basis on which to proceed further in this most fascinating of hobbies ? That I failed to do any serious ornithology was largely due to the lack of two essentials, time and transport. The scarcity of fellow bird-watchers around Eldoret was a distinct disadvantage also, a 'dying species' I was told on arrival. There is nothing more helpful than being shown the ropes by someone already in residence . . perhaps I should have started with the Wednesday morning bird walks from the National Museum, Nairobi, but I was never in a position to take advantage of those either !

I have only been interested in birds for a mere four years, coming back to the hobby in my forties after a childhood phase, and as a consequence saw more lifers in Kenya than in the previous three years, when most of my bird-watching was carried out in Saudi Arabia.

Initially during that first European winter most of the birds that I identified proved to be Palaearctic migrants, a trifle disappointing but after all those were the species I was familiar with from past experience. Then as the advert says, I discovered Baringo. My first week-end there, in company with the ever-helpful and talented Terry Stevenson, yielded a vast haul of lifers and now, looking through my notes back in an English winter again, I see that Baringo proved to be the most successful venue, followed by Nakuru and the environs of Eldoret. I found several 'classic' spots disappointing, notable Naivasha, largely on the grounds of access, and Mida Creek, when it rained and rained. On the other hand, places such as Kakamega, West Mau Forest, Sokoke etc. were more for the specialist than the tyro.

Some bird-watching experiences were, of course, absolutely inforgettable, and will last a lifetime. Amongst the many, the first inland Reef Heron at Baringo. This was in May 1979, not an original observation - it was known to be there - but I was happy to confirm the sighting previously recorded on the Persian Gulf. However, the first Woodchat Shrike at Baringo was all mine; and since accepted. I had never thought that I would be impressed by birds en masse but circa $\frac{3}{4}$ million flamingoes at Lake Bogoria couldn't fail to be a spectacle that anyone, bird-watcher or otherwise, would treasure. The Blacksmith Plover defending its nest against the approach of my landrover at Nakuru. Comparative rarities such as Taveta Golden Weaver at Tsavo (how many U.K. ornithologists can match that). African Skimmers on Turkana. And so on.

Amongst aids I found the Annual Census form invaluable, as it afforded a guide to the frequency of species despite an inevitable Nairobi bias . . surprisingly, by the end of my tour I had still failed to see, or more likely identify, many of the more common birds, i.e. those occuring more than 10 times in the Census. (List submitted to the Editor, List A) Perhaps I should have joined those Wednesday morning bird walks after all !

Regarding books, the Williams guides proved indispensable. I know that they have their critics, particularly in respect of the paucity/quality of the illustrations. (I noted on my return to U.K. that the latest British guides are entirely illustrated by colour photographs. Perhaps this will eventually be done in Kenya, at least for the easier species, as I'm certain that enough material is available). But if one is prepared to read the small print Williams is very good value indeed.

I purchased the Mackworth-Praed and Grant in the U.K. at considerable cost, consoling myself it was an investment and now believe a reprint is due ! If you are buying the original edition make sure that both volumes are complete with all plates. I supplemented the above with Roberts *Birds of South Africa* (n.b. latest edition !) and for Palaearctic birds the three usual U.K. field guides in paperback, of which I found Collins' *Birds of Britain and Europe* (Mountford et al) the most useful. Of course, one could easily build up a library for Palaearctic birds which are well covered, e.g. *Field Identification of European Raptors* etc.

I also found *Scopus* invaluable, for example the article on Greenbuls, which, although somewhat advanced for the stage that I had reached, would have been indispensable had I been able to continue in Kenya or perhaps visited Kakamega etc. more often. Again, on returning to the U.K., and too late once more, I discovered the late Vernon D. van Someren's *A Bird Watcher in Kenya* and wish I had found it before. Obviously, one needs to prepare most carefully before embarking on bird-watching in a fresh country and a reliable bibliography is a must.

After about nine months of my allotted year in Kenya I drew up two series of charts showing proportions of families seen and the most fruitful venues. I know this is tick-listing again, but it did indicate which species I was strongest in and which weakest (Waders v. Warblers) and the habitats to be investigated. Obviously, inland areas, the dry and arid ones. Kenya is, of course, justly famed for its rich variety of habitats and micro-climates. Consequently, my final fortnight was spent touring Tsavo, Amboseli and

Masai Mara, finishing at beloved Baringo. This move enabled me to boost my total by more than 50 species.

Thus ended a memorable tour and exceeding my target, set a year previously, by 44 !

D.M. Hodges, c/o Foster Wheeler Limited, P.O. Box 1,
FAWLEY, SO4 1TB, England

(Mr Hodges bird lists, refered to in the above article, are available for any interested member to read, in the Society's office at the National Museum. Ed.)

OBSERVATION OF A PAIR OF PYGMY FALCON AT THEIR NEST

At 18,30 hrs on 8th September 1979 at Bushwhackers, Kibwezi, Kenya, a male Pygmy Falcon, Poliherax semitorquatus was seen being mobbed by a Drongo, Dicrurus adsimilis, thus creating an interest. Early the next morning the bird was observed perched on top of a Commiphora tree where it was investigating abandoned White-browed Sparrow Weaver, Plocepasser mahali, nests for 30 minutes. The female joined the male and then flew into one of the nests. She stayed inside for five minutes and then flew away. It was suspected that the pair was preparing to, or actually nesting, in the abandoned nest.

On 27th October 1979 we returned to Bushwhackers and observation was continued on the nesting pair. At 10.30 hrs the pair was seen perched on a Commiphora, the female had a small lizard which she took to the nest. It was obvious that the nest contained young. At 11.05 the female brought more food (not identified) and stayed in the nest. The male was seen at 11.40 perched in a tree but he did not have any food. At 12.05 he called softly from his perch and then flew to the ground, where he unsuccessfully tried to pick something up.

At 12.07 he flew into the Commiphora again and perched about a metre from the nest; at 12.09 he flew to another tree a little further away. By 12.29 the male was seen inspecting another nest in the nest tree while a flock of Sparrow Weavers mobbed him. He appeared unperturbed, and continued with his inspection.

Observation was resumed at 15.00 and by 15.07 the female brought a grasshopper, passed it to the young and then waited at the entrance for 3 minutes before flying away. Between 13.00 and 17.55, the male was not spotted. At 17.56 he flew into a nearby tree and ate a lizards tail. At 18.07 the female joined her mate and both birds perched in a tree for three minutes, after which the female entered the nest. By 18.14 the male joined the female at the nest but it was not possible to ascertain whether both adults were in the nest due to failing light. The nest certainly did not look big enough to hold the whole family.

The following morning the male was perched on the Commiphora tree, the female was not in sight.

- - * - -

OBSERVATION ON A PAIR OF WHITE-BELLIED TITS

On 28th October 1979 at Bushwhackers, Kibwezi, a pair of White-bellied Tits, Parus albiventris, were observed feeding in a Commiphora tree. The pair fed for a few minutes on insects which were caught amongst the bark.

A little while later the female entered a hole formed at the base of a broken branch, situated 2.5 m from the ground. The female was inside for two minutes, then she came out and looked for the male who by now had stopped feeding and was waiting outside the hole. On seeing her mate the female returned to the hole where she stayed for four minutes; the male kept his eye on the hole. When the female came out the male went in and inspected the hole for a minute, then joined the female and flew off. The hole was not checked to see if it was occupied.

Cecilia Muringo, Bird Room, National Museum, NAIROBI

RANDOM BIRD NOTES

1) Between 12th and 15th March 1980, about 150 White Storks, Ciconia ciconia, about 20 Woolly-necked Storks, C. episcopus, and about 50 Open-bill, Anastomus lamelligerus, were all feeding together on a flooded plain immediately east and close to Governor's Camp, Mara Game Reserve, Kenya. They appeared to be concentrating on the large numbers of frogs in the pool.

2) Three seperate Osprey, Pandion haliaetus, seen in the vicinity of Crescent Island, Lake Naivasha on 29th February 1980.

3) European Rollers, Coracias garrulus, in large numbers, all in full breeding plumage throughout Tsavo West National Park, 21st - 24th March 1980.

4) On 20th March 1980 on the Uaso Nyiro River, Samburu Game Reserve an adult male Bateleur, Terathopius ecaudatus was seen to swoop and catch a cat fish in shallow water, it then flew up to a nearby tree holding the fish in one foot and devoured it all.

At the same locality and date a Secretary Bird, Sagittarius serpentarius was seen to catch and swallow whole a young African Hare - first killing it by stomping with its feet.

5) A group of 12 Secretary Birds were seen together at Kilaguni Lodge, Tsavo West National Park on 22nd March 1980. There was much head bobbing.

6) In the Governor's Camp area of the Mara a Crowned Plover, Vanellus coronatus, nest was found containing a single egg on 12th March 1980. The nest was on rocky gravel and contained no nest material. The nest was discovered when the sitting bird rose with wings outstretched and attacked a bull elephant who paused and walked round the nest !

Peter Davey, P.O. Box 15007, NAIROBI

A VENTURESOME PUFF ADDER

The following observation may be noteworthy in consideration of the possible role of perrenial rivers as barriers to the distribution of small terrestrial vertebrates, or gene flow between divided populations. Specifically it concerns a strictly terrestrial snake, the puff adder, Bitis arietans (Merrem), apparently making a deliberate attempt to cross the Galana River a few kilometres down stream from the Sala Gate of the Tsavo East National Park on the clear moonless night of the 14th February 1980.

At that time the afternoons and early evenings were windy and most of the night calm, so that the first rays of the rising sun picked out in stark relief the tracks left by nocturnal animals on the fine sand of the wide river bank. Such tracks are often of interest as it is usually possible to reconstruct much of what went on during the hours of darkness without having distrubed the animals in any way. Puff adder tracks are very distinctive, and the animal in question (which was not seen) left a very clear impression, so there was no doubt about the identification. Along the full length of the track was a very distinct scratch mark. I have seen a similar scratch mark in a puff adder's track many years ago in the Tsavo Park near Aruba, and on that occasion was able to track the snake down and identify the cause as a tick attached between two ventral scutes. This is unusual as ticks normally lodge among the dorsal and head scales. Whatever it was, however, that caused this scratch mark, its presence was fortuitous as it positively identified the individual when the track was lost and picked up again.

The track first appeared emerging from a rocky and grassy slope on the south side of the river and went in a near straight line at right angles to the river across 3 metres of sand then 3 metres of mud, then 15 metres of sand and finally through some soft mud between a few rocks before disappearing at the water's edge. The track was later picked up on a low mud island, the snake having swum across 24 metres of water and having been swept down stream 26 metres. There again the track went in a straight line at right angles to the river, across 5 metres of mud before disappearing in the water on the other side. The maximum flow encountered by the snake was 0.57 metres/second, but it varied greatly so this figure cannot be used to estimate the swimming speed. The portion of the river crossed was estimated at 20% of the full width. The rest of the story is not known.

It is hard to imagine what induced the beast to undertake this hazardous journey (it cannot seriously be suggested that it had gazed with longing eyes at rich hunting grounds more than 120 metres across the river !). From the time it reached the sand it had certainly not been actively chased, and at no time did it deviate more than a few degrees from its initial course. At both points of entry to the river there were no sand or mud banks ahead.

Alex MacKay, Division of Natural Sciences,

National Museum, NAIROBI

NATURAL HISTORY NOTES FROM KAKAMEGA FOREST, WESTERN KENYA

Part 2 LEPIDOPTERA (2)

Correction: the last four lines of the first part of this article, (EANHS Bulletin, March/April 1980, p. 34) should read:
'*Vanessula milca latefasciata* Joicey & Talbot. Orange and Brown Very common in shaded areas.
Phalanta columbina columbina Cramer. Dusky Leopard. Moderately common in the forest.'

ACRAEIDAE

Bematistes quadricolor latifasciata Sharpe. Not very common in the shady areas in the forest.
Bematistes poggei nelsoni Grose-Smith & Kirby. Quite common on the wider paths in the forest.
Acraea cerasa unimaculata Grase-Smith. Common in sunny areas in the forest.
Acraea sotikensis sotikensis Sharpe. Only one seen.
Acraea perenna perenna Doubleday & Hewitson. A few seen flying in the clearing by the Guest House.
Acraea penelope vitrea Eltringham. Only one seen.
Acraea servona rhodina Rothschild & Jordan. Common in sunny areas in the forest.
Acraea semivitrea Aurivillius. Common in sunny areas in the forest.
Acraea disjuncta disjuncta Grose-Smith. Very common around the edges of the forest and the most common *Acraea* there.
Acraea alciope alciope Hewitson. Only a few seen, normally along open paths.
Acraea lycoa tirika Eltringham. Common at edge of forest.

LIBYTHEIDAE

Libythea labdaca Westwood. African Snout. Occasionally seen on damp patches.

RIODINIDAE

Abisara neavei neavei Riley. Very common sitting on leaves along the paths in the forest, previously very rare.

LYCAENIDAE

Teriomima sp ? Two seen flying around each other in front of guest house.
Lachnocnema bibulus Fabricius. Two seen on a large *Vernonia* in the grassland near the guest house, feeding on the secretions of some Jassidae (Plant Bugs).
Iolaus sp? Only one seen, flying low along edges of a shady path.
Anthene ligures Hewitson. Very difficult to tell from other species of the genus. Apparently common, sitting on leaves at edge of clearing.
Anthene indefinita indefinita Bethune-Baker. Also seems to be common at edges of clearings.
Anthene schoutedeni Hulstaert. Common on leaves along paths in the forest, particularly in small patches of sunlight.
Phylaria herisita intermedia Tite. Only one seen.
Syntarucus telicanus telicanus Lang. Common Blue. Very common in grassy areas around the edges of forest.
Lampides boeticus Linnaeus. Long-tailed Blue. Very common in all the grassy areas.

Cupidopsis cissus Godart. Several seen in the grassy areas.

Zizeeria otis Fabricius. Only one seen with a well striated underside (the spots are streaked, a not uncommon form in the Lycaenidae, but rare in other families).

Zizula hylax Fabricius. As usual, very common amongst the very low plants and flying between grass-stems in open areas.

M.P. Clifton, Entomologist, National Museum, NAIROBI

THE VEGETATION AND LAND USE OF NORTH MAU ESCARPMENT

The area described lies between Molo township in Nakuru District and Chepkorio in Elgeyo-Marakwet. It is a forest vegetation we see when we travel either along the Molo-Tamboroa-Burnt Forest road or Eldama Ravine-Makutano-Burnt Forest. These areas are all highland areas on the western escarpment of the Rift Valley; once part of the 'White Highlands'.

Timboroa is at the highest summit over 3,000 metres above sea level while Molo, about 2,600 metres above sea level could be regarded as the lowest on the eastern side. In the *Atlas of Kenya* (1970) on vegetation types and land use, this area is delineated as ecological zone II.

Although the vegetation of Mau South, West and East escarpments has been described by P.E. Glover and E.C. Trump, the northern Mau vegetation has not. Similarly the vegetation of the Cherangani Hills which lies on the north of Chepkoeio township has also been surveyed and described.

Since the turn of this century, the area has been opened up, using fire, at first for large scale farming in cattle, sheep rearing, wheat, oats and rape growing. Because it is also a watershed area it was also developed for plantation forest growing soft woods, *Pinus* and *Cupressus* spp. The little climax forest vegetation that was left was cleared, again by fire in the early seventies for forest development and also for small scale farming. Today we therefore see this area with large scale farming as well as small scale farming. This subsistence farming involves the rearing of cattle, sheep, hens, growing pyrethrum, cabbages and irish potatoes. The only remaining forest of the original type is found in pockets, being found along river courses, on the edge of plantation forests and a significant one around Ainabkoi. It grows to over 20 metres high with lichens hanging on branches of trees and shrubs.

Just like that one in the Mau south it is dominated by *Juniperus procera* - *Olea africana* - *Podocarpus milanjiana* association. Quite frequently we have *Dombeya goetzenii* which is highly rated for honey, *Polyscias fulva* and *Cussonia holstii*. *C. holstii*, *C. spicata* and *Acacia lahai* are normally found towards the transitional zone 111. At very high altitudes, for example around Timboroa we have *Hegenia abyssinica* and thickets of Bamboo *Arundinaria alpina*. Where there are glades, the common grass is Nandi setaria, *Setaria sphacelata*, Kikuyu grass, *Pennisetum clandestinum*, and the Manyatta grass, *Eleusine jaegeri*. It is also here that we have an invasion of the stinging nettle, *Urtica massaica*.

This area is normally covered by mists, at night and early morning. It has also been described as 'the drier highland forest' by Dale and Greenway.

REFERENCES:
Atlas of Kenya (1970) Kenya Government Printer.

Dale, I. & Greenway, P.J. (1961) *Kenya Trees and Shrubs.* Buchanan's Kenya Estates Ltd.

Glover, P.E. & Trump, E.C. (1970) *An Ecological Survey of the Narok District of Kenya Masailand.* Part II. Vegetation.

P.W. Mumiukha, Egerton College, P.O. NJORO, Kenya

THE NAMES OF EAST AFRICAN PODOCARPUS SPECIES

In '*The Flora of Tropical East Africa*' Gymnospermae (1958) four species of *Podocarpus* are recognised, viz: *P. milanjianus* Rendle, *P. ensiculus* Melville, *P. gracilior* Pilg. and *P. usambarensis* Pilg. The first three of these are difficult to seperate from three South African species with older names, *P. latifolius* (Thunb.) Mirb., *P. henkelii* Stapf and *P. falcatus* (Thunb.) Mirb. By 1970 each of these species-pairs had been collected in Malawi and F. White working on the trees of that country expressed the following opinion in '*The Evergreen Forests of Malawi*' published that year, "The differences seperating the northern and southern members of the three pairs of species are so slight and so variable that it seems that specific rank is scarcely justified. A more comprehensive study than those previously made is necessary to settle the matter ".

In 1978 in his '*Biogeography and Ecology of Southern Africa*' p. 173, White refers to what he previously termed the three species-pairs as *P. falcatus* s.l., *P. henkelii* s.l. and *P. latifolius* s.l.

R.B. Drummond in his authoritative '*A list of trees etc in Rhodesia*' in Kirkia 10:231 (1975) treats *P. milanjianus* as a simple synonym for *P. latifolius* and is followed in this by K. Coates Palgrave in his splendid '*Trees of Southern Africa*' (1977). Caotes Palgrave did not have to decide how to treat *P. gracilior* and *P. ensiculus* as these names have not been used south of the Zambezi, but notes that there is considerable evidence that they are conspecific with *P. falcatus* and *P. henkelii*. Mr David Hunt of Kew has kindly replied to an enquiry about *milanjianus* stating that it should probably be treated as a sub-species of *latifolius*. As the *falcatus-gracilior* and *henkelii-ensiculus* differences appear to be even slighter than those between *latifolius* and *milanjianus* there seems to be no doubt that F. White's 1978 treatment should be followed and that we should refer to *P. falcatus* (Thunb.) Mirb. s. lat. (*P. gracilior*), *P. henkelii* Stapf s. lat. (*P. ensiculus*) and *P. latifolius* (Thunb.) Mirb. s. lat (*P. milanjianus*).

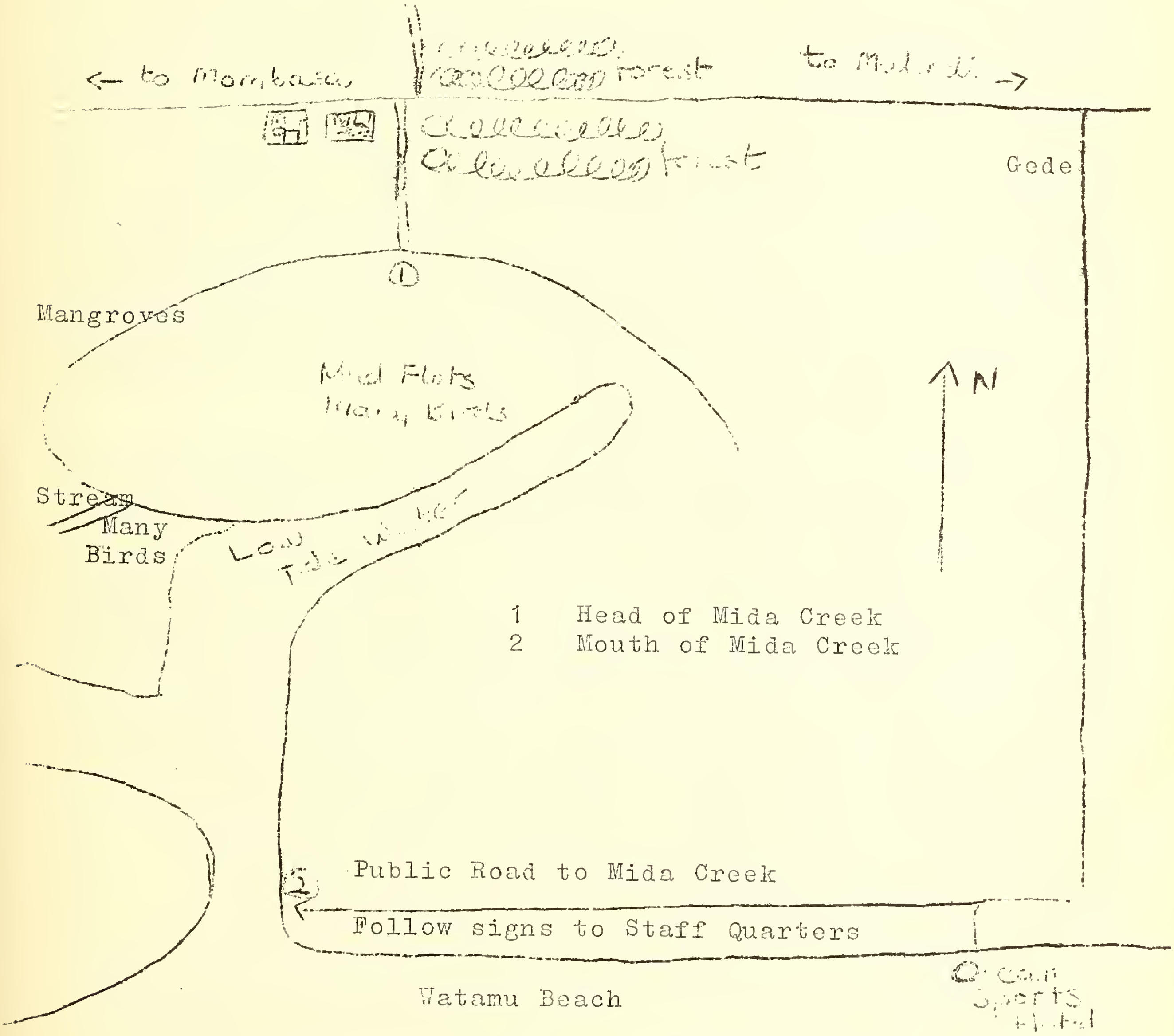
The fourth East African species, *P. usambarensis* is closely related to *P. falcatus*, differing in its larger fruits with thicker walls. The record of *P. usambarensis* from the Taita Hills in 'Kenya Trees and Shrubs' seems to be erroneous. The Podocarpus growing there appears to be P. latifolius, though fruits have not yet been obtained to confirm this.

J.B. Gillett, Herbarium, NAIROBI

DIRECTIONS FOR MIDA CREEK, KENYA COAST

On a recent trip to Mida Creek we discovered that there are no maps of the bird sanctuary. Mary Nichols of the Ocean Sports Hotel was kind enough to draw us one which we followed and it works ! We would like to share it with EANHS members.

The dirt track which leads south to the creek off the main road from Mombasa to Malindi is easy to miss. It is at the Edge of the forest just on the Malindi side of the milage post that says 'Malindi 22' and on the other side 'Mombasa 97'. The best time to see the birds is at low tide. The mud flats can be very hot at noon, too hot for young children. I hope members will find the map useful.


← to Mombasa
forest
to Malindi →
forest
Gede
①
Mangroves
Mud Flats
Many Birds
N
Stream
Many
Birds
Low Tide Water
1 Head of Mida Creek
2 Mouth of Mida Creek
2
Public Road to Mida Creek
Follow signs to Staff Quarters
Watamu Beach
Ocean
Sports
Hotel

Susan Gilpin, P.O. Box 30577, NAIROBI

OBITUARY. PROFESSOR ARTHUR LOVERIDGE

With the passing of Professor Arthur Loveridge on Saturday February 16th 1980 at the General Hospital, Jamestown, St. Helena, the Island lost a man who made his mark in life in more than one way.

As a boy Arthur Loveridge was intensely interested in natural history, and first gained experience in this field at the National Museum of Wales and Manchester Museum. In 1914 he applied for, and obtained, the position of Curator of the Nairobi Museum which was formed at that time by the East Africa and Uganda Natural History Society. At the outbreak of World War 1 he joined the East African Mounted Rifles, and for a time served as personal despatch rider for General J.C. Smuts. On one occasion, when scouting ahead of the main force, he heard the General's car coming through the scrub behind him. Arthur Loveridge quickly dismounted and moved forward to salute the General, unaware that his horse had followed him closely. As he saluted, his rifle jerked upwards and caught the horse beneath the chin, earning young Loveridge a sharp reprimans from Smuts, and a lecture on kindness to animals. About 50 years later, when the name Loveridge was well known in his particular field of work, a mutual friend of both the Professor and the General asked Smuts if he remembered the incident, and the General replied that he did so clearly.

When the War ended, Arthur Loveridge began the task of building up the collection of East African fauna for the Nairobi Museum, known today as the National Museum of Kenya. It was during these early years in Kenya that Arthur Loveridge's own enthusiasm for collecting and studying reptiles, amphibians and birds that first fired the imagination of the then young Louis Leakey, then no more than a boy, teaching him the art of collecting and skinning mammals for museum specimens.

Leaving the Nairobi Museum, Arthur Loveridge sought the open spaces and became an assistant Game Warden in what was then known as Tanganyika, where he had endless opportunities for safaris into the bush, observing big game animals and protecting them from poachers. Married in 1921 he was invited three years later to join the staff of the Museum of Comparative Zoology in Cambridge, Massachusetts, which was associated with Harvard University. He was by this time becoming well known for his field work. Research work gave him many opportunities for expeditions to East Africa, supported financially by several American foundations. He used to say that it took him a year to study and classify all specimens from an expedition, after which he gave a year to dealing with specimens given to the Museum by collectors from around the world, then it required a year to prepare and plan the scientific work for the next trip. In the course of five expeditions and 33 years at Harvard, he collected 8,469 specimens of reptiles, 11,597 amphibians, 3,436 animal skins and skulls. He exploits include capturing spitting cobras and a 14 foot python with his bare hands. Mrs Loveridge and her son, Brian (at 11 years of age) accompanied him to little known parts of East Africa. His experiences are recorded in adventure books he has written, and his discoveries made are set out in over 200 scientific works. In a series of broadcasts over an American radio station, he dealt with such subjects as 'Capturing spitting cobras alive', 'Why lions become man-eaters' and 'Pythons as household pets'. As a lecturer, he was in demand in America as well as African countries.

Upon retiring from Harvard in 1957 the Professor and Mrs Loveridge moved to St. Helena, but this in no way meant the end of his life-long interest in natural history. He maintained correspondence with a number of museums and scientific bodies around the world, as well as taking an interest in the creatures of St. Helena.

Quite apart from his academic contribution to knowledge, the Professor's quality of life was obvious, and his quiet demeanour and humility an example to all who knew him.

A brief funeral service was held at the graveside in the Dungeon on Sunday afternoon, where the body of the Professor was laid in a grave next to that of his wife who died here in June 1972.

Condolences are extended to Mr Brian Loveridge who spent the last few years with his father.

(This obituary was taken from the St. Helena News Review, Vol. X11, No. 2,098, dated 22nd February 1980. Ed.)

"A GUIDE TO THE WILD FLOWERS OF KENYA"

To be published by Collins; expected before Easter 1981 at c. Shs 150/- (less to EANHS and Kenya Horticultural Society members). Size c. 14 x 21 cm, 6 pictures per page. Author, Sir Michael Blundell.

267 species belonging to 202 genera in 66 families are to be illustrated by over 300 colour photographs. Brief descriptions of species, genera and families are provided with notes on some 500 species in addition to those illustrated. Plants from most vegetation types in Kenya, from the high mountains to the coast and from lake and forest to subdesert are shown. While most of the plants are such as are likely to attract the attention of visitors, others are interesting varieties, of which some have never previously been shown in pictures. A glossery, illustrated by line drawings, explains all botanical terms employed. The staff of the Herbarium and the Museum botanist have collaborated to ensure full scientific accuracy.

J.B. Gillett

"BIRDS OF EAST AFRICA"

We wish to advise members that as the special pre-publication offer for this book expires on 30th April, the new price as from 1st May will be :-
For East African delivery : Shs 125/- (inclusive of surface mail delivery)
For overseas delivery : Shs 130/-, £8.00 or U.S. $ 17.00 (inclusive of surface mail delivery)

In all cases cheques should be made out to BIRDS OF EAST AFRICA and sent to D.A. Turner, P.O. Box 48019, NAIROBI. Publication date is expected to be July 1980.

WANTED AND LOST

WANTED : Praed and Grant, Birds of West and West Central Africa, Vols. 1 and 2. Please contact Mrs M. Candy, P.O. Box 1, KAIMOSI.

LOST : Binocular case left in a car on a Wednesday morning bird walk in about November or December. Please contact Mrs Benjamin, telephone 582649, NAIROBI

SOCIETY NOTES

Further News from Longmans The straight reprint of the classic work, African Handbook of Birds, Series 1, Birds of Eastern and North Eastern Africa, Volumes 1 and 2 by C.W. Mackworth Praed and C.H.B. Grant should be in Nairobi by the end of July. The Society is offering its members these books at a special discount price; orders should be placed with the Secretary, P.O. Box 44486, NAIROBI as soon as possible.

Adventure Trails Camp Miss M.I. Keating has kindly made a complete list of the birds seen on the Society's trip to Adventure Trails camp near Maralal. The list covers the camp itself, dams within 20 km of the camp, Karisia Hills and the Maralal Lesiolo area. Any member requiring a copy of this list should please contact the Secretary; if ordering by post please include Shs 5/- for photocopies and postage.

1980 Eclipse So no EANHS member witnessed the eclipse or saw any interesting bird, mammal or plant behaviour ! This is the impression we get as not one report has been received. Please send in your observations, even if minor or negative (e.g. the birds did not react to the eclipse at totality) to the Editor, P.O. Box 44486, Nairobi. These will be published in either the Bulletin or Journal.

Birds of the African Rain Forests These two super records are still available in the Society's office, Shs 90/- for the set. Recorded by Stuart Keith, these are essential to anyone watching birds in the local forests and many mystery calls will finally be identified.

African Insect Life the book which we have been advertising for a long time has finally arrived. Members who have ordered copies should collect them from the office after 12th June (The Secretary will be away before that) - price Shs 250/-. This book is recommended to all those who would like to know more about the insects of east and central Africa.

Life on Earth books have also finally made it and will be on sale at the video showings of the film. Price will be approximately Shs 155/-. Orders can also be placed through the Society's secretary).

Secretary Away from 6th to 12th May 1980. Messages can be left under the office door or with Mike Gilbert in the Herbarium.

Membership Please continue to support the Society be joining your friends as members. Application forms available from the office in the National Museum, or write to P.O. Box 44486, Nairobi.

NEW MEMBERS

The following new members have been elected :

Local Full Members
Mrs Sue Brothers, P.O. Box 30577, NAIROBI
Mr J.A. Dawson, P.O. Box 4, NAIVASHA, Kenya
Mr and Mrs Dobbelaere, P.O. Box 30709, NAIROBI
Mr E. Ellen, Dept. of Agricultural Engineering, P.O. Box 30197, NAIROBI
Mr J.D. Emmerson, P.O. Box 10222, NAIROBI
Mr W.J. Faithfull, P.O. Box 19001, EMBAKASI, Nairobi
Ms Helen Fitch, P.O. Box 43615, NAIROBI
Mr and Mrs L. Karstad, Vet. Res. Labs., P.O. KABETE, Kenya
Mr and Mrs D.F. Kent, K.I.A., P.O. LOWER KABETE, Nairobi
Mr Gerd Langer, P.O. Box 14596, NAIROBI
Mr J.R. Malcolm, c/o Allen, P.O. Box 41190, NAIROBI
Dr and Mrs G.H.G. Martin, Dept. of Zoology, P.O. Box 43844, NAIROBI
Mr Simon Muchiru, Wildlife Clubs of Kenya, P.O. Box 40658, NAIROBI
Mr Kenneth R. Peek, P.O. Box 19073, NAIROBI
Ms J. Perkins, P.O. Box 30322, NAIROBI
Rev. Samuel Senoff, P.O. Box 9, ELDAMA RAVINE, Kenya
Mr Kamoji Wachiira, P.O. Box 14548, NAIROBI
Ms Sheila Waterman, c/o Mr T. Day, Pannell, Bellhouse, Mwangi, P.O. Box 44286, NAIROBI
Mrs P. Wilkinson, British High Commission, P.O. Box 30465, NAIROBI
Mr and Mrs B.M. Williams, P.O. Box 52, KIAMBU, Kenya
Miss Marylyn Winchester, P.O. Box 15012, NAIROBI

Change of Status to Life Membership
Dr K.M. Howell, Dept. of Zoology, P.O. Box 35064, DAR ES SALAAM, Tanzania

Overseas Life Membership
Dr D. Turner, c/o Mr and Mrs . Lea, 61 Old Lodge Lane, Purley, Surrey, U.K.

SOCIETY FUNCTIONS

Monday evenings at the Serena Hotel, Nairobi, the video series 'Life on Earth' continues until 16th June. Showings at 5.30 and 7.00 p.m. The Society is offering books on related subjects to the series at attractive prices. Casual guests will be admitted if room allows, minimum donation Shs 20/-.

Monday 12th May 1980 at 5.30 p.m. in the Museum Hall, Nairobi Dr Norman Myers will give an illustrated lecture on 'Tropical Rain Forests, a Global Heritage in Decline'.

Sunday 18th May 1980 'Dudu Crawl' led by Mike Clifton. Please meet in front of the National Museum, Nairobi at 9.30 a.m. and bring a picnic lunch if you wish to stay all day. The 'dudu crawl' will take place close to Nairobi.

May 31st/June 1st weekend, 1980 MARA BUFFALO CAMP. The Society has been offered the following very attractive terms at this luxury camp in the Mara Game Reserve - outside the park - these terms are for members booking for two nights (or more) :

Adults	Shs 150/- per person, per night
Children	Shs 75/- per child, per night (under 12) for

bed/breakfast/dinner and packed lunch.
The camp is situated about 240 km from Nairobi. One of the special attractions are walking trips, so members participating should bring suitable footware. Also the area can be cold at night and warm clothing is advisable.
If you wish to take advantage of this special offer to visit an area rich in game and scenically beautiful, please fill in the enclosed slip and return it to Mrs A.L. Campbell, P.O. Box 14469, Nairobi together with full payment by crossed cheque made out to MARA BUFFALO CAMP. Please also enclose a stamped addressed envelope (large enough to take brochure and route instructions). Please book as soon as possible.

Sunday 8th June 1980 Day trip to the Embakasi Gorges led by Mrs Judith Rudnai. This trip will study the birds and plants of this interesting area. Please meet at the National Museum, Nairobi at 9.00 a.m. and bring a picnic lunch. Walking shoes and waterproofs are advisable.

Monday 9th June 1980 at 5.30 p.m. in the Museum Hall, Nairobi Dr Graham Martin of the Department of Zoology, Kenyatta University College will give a lecture on 'Wild Animals as a Source of Food in West Africa'.

Monday 14th July 1980 at 5.30 p.m. in the Museum Hall, Nairobi Dr Alan Hildrew will give an illustrated lecture on 'The Natural History of Temporary Rain Pools'.

Monday 11th August 1980 at 5.30 p.m. in the Museum Hall, Nairobi, the film 'Bloody IvOry' kindly lent to us by the Wildlife Clubs of Kenya.

Wednesday morning bird walks continue, led by Mrs Fleur Ng'weno. Please meet outside the National Museum, Nairobi at 08.45 a.m. and bring walking shoes. Walks normally last about 3 hours.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SZ
NH

EANHS

BULLETIN

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

CONTENTS

Weaver Nesting Colonies on the Magadi Road 64
Feathering the Nest 66
The Cowries of Zanzibar 67
The Australian Flame Tree in Kenya 69
Scolopacids Feeding while Swimming 70
Demented Red-chested Cuckoo 71
Society Notes 72
For Sale and Wanted 72
Society's New Telephone Number 72
New Members 73
Society Functions 74

WEAVER NESTING COLONIES ON THE MAGADI ROAD

In years of good to heavy rainfall, when grass and herbage has been plentiful, great numbers of weavers and other graminivorous birds have nested at points along the Magadi Road from Kasemes (Olepolos) to Lake Magadi and south to the Ewaso Nyiro swamps near the Tanzanian border.

One of my earliest records was for 1941 when, with my father, we examined hundred of nests. One tree along held 1388 nests of the Masked Weaver, Ploceus intermedius, and Speke's Weaver, P. spekei. (van Someren and van Someren, IBIS, 1945).

In 1970 I recorded all the nests in eleven large colonies between Kesames to Emparbal Osalie Hill along the Olekemonge - Esonorua flood plain, some 43 kilometres of road. In all 3653 nests were identified of Masked and Speke's Weavers, plus the Chestnut Weaver, Ploceus rubriginosus, Vitelline Weaver, P. vitellinus and the Black-necked Weaver P. nigricollis. Breeding commenced in early April and continued through to 31st May, when the Government Quelea Control team saw fit to cut down all the nest trees. This act, however, permitted some detailed examination of the nests which provided data of the extent of usurpation of weaver nests by the Chestnut Sparrow, Passer eminibey, the Cut-throat, Amadina fasciata, and utilisation of the abandoned nests by the Silverbill Lonchura malabarica as well as parasitisation by the Didric Cuckoo, Chrysococcyx caprius. The Quelea Control team almost too late found the massive Red-billed Quelea, Quelea quelea, colony nesting in Acacia nubica near Oltepesi, despite the fact that they had been given a detailed map of the colonies location !

Extensive breeding took place again in 1971 but at a slightly later date. Colonies were found more or less at the same points as in 1970. Further counts were made of the nests of different species but once again in the midst of my study, the Quelea Control team cut down all the trees, but once again advantage was taken to make detailed examination of all the nests where much data was recorded concerning the Didric Cuckoo and the Chestnut Sparrow.

Further extensive breeding was found again on 15th June 1975 in, what by now, appeared to be 'traditional' sites, despite the loss of trees felled by the control team. Thirteen sites involving 120 Acacia trees were noted with, here and there, a few odd nests outside the major colonies. Again these were of Speke's, Chestnut, Masked and Vitelline with a few Black-necked. By 22nd June further colonies were found near Ololkisailie to Oltepesi and the large burrow pit at K 27.6 (from the top of the Ngong Hills). The grassland swarmed with Cardinal Quelea, Quelea cardinalis, with some Red Bishops, Euplectes orix, and White-winged Widow Birds, E. albonotatus. Chestnut Sparrows were also at the weaver colonies but they also nest singly or in colonies, particularly in small Balanites trees amongst the Acacias. A huge colony of Red-billed Quelea nested over many hectares to the south on the Magadi road but this was apparently not found by the Control team.

1977 was an extremely wet year with Ololkisailie recording 311.8 mm (over 12 inches) of rain in 19 days. Grass was long everywhere with great numbers of Cardinal Quelea, White-winged Widow Birds, Red Bishops and Fire-fronted Bishops, Euplectes diadematus and some Yellow Bishops, E. afer, while all the traditional weaver nest sites were occupied by Speke's, Chestnut and Masked Weavers. We estimated some 10,000 nests. Didric Cuckoos and Chestnut Sparrows as usual were in attendance in numbers.

Despite good rains in April and May 1978 there were only a few colonies of Masked Weavers and many were deserted quickly. My notebook for 16th April records, "expected to see many colonies - virtually nil", and on 15th May reads, "several new colonies of Masked Weavers - no Chestnut, no Speke's". Failure to nest in numbers was surprising and the reason unknown though there were many colonies of all three species nesting round the Rift Valley Swamp, west of the Ngong Hills and north of the Magadi Road.

At the begining of May 1980 sections along the Magadi Road from the top of the Ngong Hills to Esonorua flood plain to Empabal Oselei Hill had received good rainfall. This had produced fair grass and herb growth though not nearly as lush as in previous seasons but was sufficient to support thousands of Cardinal Quelea and some Red Bishops. On 2nd June we made our first survey of the weaver colonies, the first of which of Masked Weavers was found 18.4 km (from the top of the Ngong Hills) thereafter colonies of Masked and Chestnut were located at intervals along to 62 km, almost to Magadi but the surprise was the complete lack of Speke's Weavers. We made estimates of the nests and came up with the figure of 9860 nests in 30 colonies.

We up-dated the survey on 8th June with Ted and Patsy Norris and found more colonies, some well away and south and the estimate had to be radically revised. We came up with 20,000 nests but still no Speke's. The following Sunday, 15th June, we undertook a further survey down the road estimating the colonies and examining a few. We took the track from Oltepesi which runs north more or less alongside the dry stream bed behind Oltepesi and here we found many more colonies. Several of these had hundreds of nests so once again we revised our guesstimate and considered that there were between 25,000 and 30,000 nests for it was certain that we had not located all colonies.

We met up with Dick Allen of the FAO/UNDP Regional Quelea Project. He was on his way to the Ewaso Nyiro River, west of Magadi to survey a large Red-billed Quelea colony. Mr Allen will doubtless be somewhat perturbed at this sudden population explosion of Chestnut Weavers for his project has already branded them as a pest species as great numbers were involved in crop destruction in the cereal areas, along with the Quelea in 1979.

Didric Cuckoos were everywhere around the weaver colonies and the rate of parasitisation must have been very high , it seemed as if every tree had one or two pairs of cuckoos. We found a cuckoo egg in the nest of the Red Bishop, a large blue egg, larger than and lighter blue than the eggs of the Bishop. We examined a great many Cardinal Quelea nests but did not find a single cuckoo egg. This we feel is strange for the nest of the quelea and bishop are similar in construction and size, both being built low in a herb amongst long grass. In 1971 when we were able to examine all the weaver nests in the felled trees we found nearly 30% of the nests in a mixed colony to be parasitised by the cuckoo or the nests usurped by the Chestnut Sparrow. In several cases we found that the sparrow had lined the weaver nest and laid its eggs above those of the weaver.

In all colonies we observed closely this year we found that the Chestnut Sparrow was in attendance and had taken over nests. We also noted Silverbills and Cut-throat and at one small colony we watched a male with two females of the Blue-headed Cordon-bleu, Uraeginthus cyanocephalus, very carefully inspecting and entering the weaver nests. In 1941 I recorded the Red-cheeked Cordon-bleu, U. bengalus, as having taken over a weaver nest. It is of interest that all these nest-utilisers make their own nests under normal conditions. The noise and movement, the coming and going of nesting weavers in large numbers, must stimulate these other birds to breed and so adopt a 'short-cut' by usurping a nest rather than going to the trouble of building their own nests.

In the many visits I have made down the Magadi road since 1941, when my particular interest in weavers was aroused, I have never seen such a vast number of nests or colonies as during this current season.

G.R. Cunningham van Someren, Bird Room,

National Museum, NAIROBI

FEATHERING THE NEST

On a visit to the Masai Mara Game Reserve in May 1980 with Priscilla Allen, Jean Hayes, Dennie Angwin and Mike Clifton, we came across the carcase of a Spotted Hyaena, Crocuta crocuta, near Mara Buffalo Camp. The carcase was making a fine meal for about 40 White-backed Vultures, Gyps bengalensis, 7 Lappet-faced Vultures, Aegypius tracheliotus, 2 Ruppell's Griffon, Gyps ruppellii, and a lone Hooded Vulture, Neophron monachus, whose small size allowed it only to snatch a few tit-bits when the larger birds were too busy fighting to notice.

There was a great deal of squabbling as the vultures tried to maintain pecking order and this caused swarms of flies to arise from the carcase. These were being taken by several Mosque Swallows, Hirundo senegalensis, who were circling overhead.

We also noticed that the Swallows were collecting all the downy feathers which the Vultures were sheding during their fights. Obviously there would be some comfortable and well-lined nests in the area !

Mrs E.B. Angwin, P.O. Box 14166, NAIROBI

THE COWRIES OF ZANZIBAR

[illegible] cowries have long been of interest to collect[illegible] figured prominently in Zanzibar's contacts with other parts of the world. Sir Richard Burton commented on their export in considerable quantities where they were used as a medium of exchange. Seashells still figure high on the list of Zanzibar's exports, including annually thousands of cowries, but Europe is now the principal destination. *Cypraea tigris* is by far the most numerous species of cowrie exported, but a scattering of others, including *C. arabica*, *C. histrio*, *C. talpa* and *C. mauritiana* are sent off with them.

Fishermen dominate the collecting of cowries in Zanzibar. Prices paid by the government provide a modest incentive for fishermen to sell the more common shells they happen upon in the course of their work. The rarer cowries often find their way (at much appreciated price) into Zanzibar Town to the shop of the island's sole private shell dealer. The rest of the collecting in recent years has been done for recreation by a very small group of expatriates. Our experience with Zanzibar's cowries is as residents of the island for a year and a half as members of this group.

It is possible to account for at least 49 species of cowries in Zanzibar's waters. Those ar present known to occur are :

C. annulus
C. arabica
C. argus
C. asellus
C. beckii
C. caputserpentis
C. carneola
C. caurica
C. chinensis
C. cicercula
C. clandestina
C. contaminata
C. cribraria
C. depressa
C. diluculum
C. erosa
C. felina
C. fimbriata
C. gangranosa
C. globulus
C. gracilis
C. helvola
C. hirundo
C. histrio
C. isabella
C. kieneri
C. lamarckii
C. limacina
C. lynx
C. nappa
C. marginalis
C. mauritiana
C. microdon
C. moneta
C. nucleus
C. onyx
C. owenii
C. poraria
C. punctata
C. scurra
C. staphylaea
C. stolida
C. talpa
C. teres
C. testudinaria
C. tigris
C. turdus
C. vitellus
C. ziczac

C. annulus stands alone as the species in Zanzibar that can be considered truly abundant. It is found almost everywhere along the island's shores in the inter-tidal zone.

The following species can be considered numerous : *C. caurica*, *C. helvola*, *C. lynx*, and *C. tigris*. The latter is a particularly successful species and despite its widespread collection for commerce it is conspicuous and ubiquitous. No other species is a widely distributed. (As is well known, this cowrie may often be found fully exposed above low water. Other species in Zanzibar which may be found similarly exposed are *C. annulus*, *C. carneola*, *C. erosa*, *C. lynx*, *C. mauritiana*, *C. moneta*, *C. talpa* and *C. vitellus*.)

We have found the following species to be common, but less evident than the previous group: *C. carneola*, *C. erosa*,

C. fimbriata, C. isabella and C. vitellus.

A rather large group of cowries can be considered uncommon. They are C. arabica, C. caputserpentis, C. chinensis, C. clandestina, C. diluculum, C. felina, C. histrio, C. kieneri, C. limacina, C. moneta, C. nucleus, C. punctata, C. scurra, C. staphylaea, C. talpa and C. teres. In a few localities, and at certain times of the year, these species are more in evidence, but one cannot be sure of always finding them even if conditions are right. Included here are two species, C. caputserpentis and C. moneta which are generally considered to be very common over much of their Indo-Pacific range.

We found an almost equally large number of species to be rare. The collector can reasonable hope to find many of these himself over an extended period. Very small numbers of most of these cowries are usually for sale in Zanzibar Town. Included are C. argus, C. asellus, C. cicercula, C. cribraria, C. globulus, C. lamarckii, C. mappa, C. mauritiana, C. microdon, C. onyx, C. owenii, C. stolida, C. testudinaria and C. ziczac.

A further group of nine species must be classified as extremely rare. These are C. beckii, C. contaminata, C. depressa, C. gangranosa, C. gracilis, C. hirundo, C. marginalis, C. poraria and C. turdus. One would not expect to be able to buy any of these in Zanzibar. Some are included by virtue of only one known specimen. C. beckii is an example. This distinctive rarity was very recently collected alive by Mr Ingo Guhr of Dar es Salaam in two feet of water (on a low tide slightly below datum) in Galaxia spp. coral near Zanzibar Town.

Further shelling in Zanzibar should indicate that some of these species are more common than we now believe them to be. Additional species should also be expected: C. nebrites should be one possibility. Another is C. erythraeensis, known from the Red Sea and Madagascar but apparently thus far not found in the area between, including the waters round Zanzibar.

Some of Zanzibar's cowries appear to be restricted to a limited habitat while others are nearly ubiquitous. In very general terms, there are four distinct habitats accessible to the collector.

1. Mud or Sand Flats These are often located in shallow bays and may be extensively exposed at low tides. Seaweed, rocks and scattered coral communities provide cover for cowries. The more cover, usually the more cowries. There are rather few places in Zanzibar where this habitat is fully developed (or preserved). Species usually found in this environment are C. annulus, C. carneola, C. caurica, C. diluculum, C. erosa, C. isabella, C. kieneri, C. lamarckii, C. lynx, C. moneta, C. onyx, C. tigris and C. vitellus.

2. Hard Reef The best and largest example is the almost continuous fringing reef off Zanzibar's eastern shore. It clears at spring low tides and cowries are found under scattered boulders or in crevices. Much of the reef is covered with marine vegetation. Other stretches of hard reef occur on Zanzibar's western shore and its bays. In the transition between this habitat and well-developed mud or sand flats,

cowries are usually infrequently found. Species associated with the hard reef are *C. annulus*, *C. arabica*, *C. caputserpentis*, *C. carneola*, *C. caurica*, *C. chinensis*, *C. cribraria*, *C. diluculum*, *C. erosa*, *C. felina*, *C. fimbriata*, *C. helvola*, *C. isabella*, *C. kieneri*, *C. limacina*, *C. lynx*, *C. marginalis*, *C. moneta*, *C. staphylaea*, *C. stolida*, *C. teres*, *C. tigris* and *C. vitellus*.

3. *Rock Cliffs* Cliffs, and the rocks at their bases, along Zanzibar's shores and on offshore islands provide a habitat somewhat different from the hard reef. *C. mauritiana* is the distinctive species of this habitat. It is not found elsewhere and it is rare in Zanzibar in even the most suitable cliff localities. Most likely to be found in holes and crevices at the base of the cliffs are *C. arabica* and *C. histrio*. *C. vitellus* and *C. talpa* have been unexpectedly found in this habitat. Around nearby Dar es Salaam on the mainland, *C. caputserpentis* and *C. cribraria* are found on rock cliffs but this was not our experience in Zanzibar.

4. *Coral Reef* Off-shore coral communities, and the rocks and debris around them, harbour the richest variety of cowries. *Galaxia* spp. seem to be a favourable habitat, but other types of coral are also frequented by cowries. Very little of the coral reef is ever exposed, even at the lowest tides. Species which occur in this environment are *C. argus*, *C. asellus*, *C. beckii*, *C. carneola*, *C. chinensis*, *C. cicercula*, *C. clandestina*, *C. contaminata*, *C. cribraria*, *C. diluculum*, *C. erosa*, *C. fimbriata*, *C. globulus*, *C. helvola*, *C. histrio*, *C. isabella*, *C. limacina*, *C. mappa*, *C. microdon*, *C. nucleus*, *C. owenii*, *C. punctata*, *C. scurra*, *C. staphylaea*, *C. stolida*, *C. talpa*, *C. teres*, *C. testudonaria*, *C. tigris*, *C. vitellus* and *C. ziczac*.

Conditions for cowries in Zanzibar remain generally favourable. Over-collecting is not a problem but there are some signs of environmental deterioration. Some of the fragile mud- and sand - flat habitats are thoroughly worked over at low tides by fair numbers of people in search of edible mollusks. Continuous digging for bivalves even in a short period seriously affects the corals and plants which hold the habitat together. Oil is generally becoming more noticable along the fringing reef on the eastern side of the island. Damage to coral reefs occurs during low tide fishing operations but it does not yet appear to be extensive. Zanzibar authorities have fortunately not permitted the use of dynamite by fishermen to harvest reef fishes, a practice which is common on the mainland.

June P. and David C. Halsted, Embassy of the U.S.A.,
P.O. Box 7007, KAMPALA, Uganda.

THE AUSTRALIAN FLAME TREE IN KENYA

The Australian Flame Tree, known botanically as *Sterculia acerifolia* (=*Brachychiton acerifolium* F.V.M.) is described by R.J. Streets as a "deciduous tree, up to 120 ft. high and 3 ft. in diameter", belongs to the Sterculiaceae family. It is an exotic plant in this country, first introduced in 1915 probably for timber but it is now grown commonly as a shade and ornamental tree. A native of Australia where it is found growing on coastal tropical rain forests right from New South Wales into Queensland. It has simple palmate leaves which have lobes varying between three and seven. As already described it is deciduous or precocious and has scarlet red flowers that give it an attractive position among the ornamental trees.

I have noticed that they never shed all the leaves; there are always a few branches carrying green leaves during the blooming time. The flowers have no corolla but bell-shaped five-toothed calyx. I have managed to observe only those growing in Nairobi, Nakuru and Egerton College campus at Njoro.

Although Streets indicates that by 1962 those planted in Zanzibar 50 to 60 years before only grew to 80 feet, the ones we have in Kenya are just over 5 metres tall. In Kenya, at least in the three areas I have observed flowering is between August and May. It takes nine months for one individual to turn all the flower buds into fruits. This means that while one part of the plant has flower buds, other parts have ripening fruits. Fruits are about 7 cm long, triangular follicles with a beak. They are black when ripe and split along one line to expose about ten yellow-brown seeds. New leaves form when all flower buds have matured into fruits.

This tree is not only used as an ornamental and shade tree but produces timber which can be used in turneries, box wood and plywood cores. When in flower, it is visited by honey bees therefore it contributes to honey production.

It is not alone in Kenya as we have wild relatives such as _S. rhynchocarpa_ and _S. stenocarpa_. These grow mainly in drier areas of Kenya.

REFERENCES:

Dale, I.R. (1953) The Introduced Plants of Uganda Protectorate. Government Printer, Entebbe, Uganda.
Cowen, D.V. (1970) Flowering Trees and Shrubs of India. 6th Revised and Enlarged edn. Thacker & Co. Ltd., Bombay.
Spuy, Una van (1971) South African Shrubs and Trees. Hugh Kearland Publishers.
Streets, R.J. (1962) Exotic Forest Trees in the British Commonwealth. Clarendon Press, Oxford.

P.W. Mumiukha, Biology Department, P.O. NJORO, Kenya

SCOLOPACIDS FEEDING WHILE SWIMMING

When feeding, Scolopacids, or Waders, often wade up to their bellies but do not typically catch food in deeper water by swimming as is usual in phalaropes.

On 17th March 1979 I spent about an hour watching the different feeding strategies of a Spotted Redshank, _Tringa erythropus_ and a Greenshank, _T. nebularia_, at a small dam near Kamae in rough pasture off the Limuru-Kinangop road. The Spotted Redshank repeatedly swam into deep water where it fed by 'picking' into the water as it moved forwards. Unlike Spotted Redshanks I observed on several occasions in Nairobi [illegible] Park between 21st January and 31st March 1973 this bird did not also 'upend', possibly because it was feeding in deeper water than the Nairobi birds. The Greenshank only once ventured out from the edge to feed likewise, soon returning to the edge to feed in typical fashion.

Between 20th and 25th April 1979 I was at Lake Nakuru where the water level was exceptionally high. Many Ruffs, _Philomachus pugnax_, were present and on each day several birds were seen swimming on the flooded grasslands where they fed both by picking at the water's surface and by snatching food items from grass stems protruding above the water. Incidentally no Ruffs were seen swimming at the dam near Kamae although about 70 were present.

Particularly in the case of the Spotted Redshanks and Ruffs it was very clear that the birds were not swimming merely because they had got 'out of their depth' but that they were doing so as a definite method of reaching otherwise unavailable prey.

J.F. Reynolds, 6 Argyle Road, Bognor Regis,
West Sussex, England PO21 1DY

DEMENTED RED-CHESTED CUCKOO

Karen,
0345 hrs
24th May 1980

In Karen there is a demented and certainly schizophrenic Red-chested Cuckoo, _Cuculus solitarius_. This bird has, for the last two weeks called - no, yelled would be a better word, almost every night from a tree outside our bedroom window.

It starts to call during the small hours and continues, unabated until dawn (presumably sleeping all day !)

No amount of stone throwing, torch flashing or abuse will silence it for more than a few minutes.

Normally a very tolerant person, my patience with this insomniac sadistic bird, has run out !

Can anyone offer any suggestions as to why this bird thinks that it would rather by an Owl, or why it is hell bent on keeping us awake with its infernal calling from the SAME tree every night ?

Perhaps all the rain it so accurately predicted has gone to its head - and short circuited its vocal synapses ?

There is, however, one benificial side effect - it does (or at least, it did) keep the Askari awake !

Exhausted Cuckoo-hater, Karen, NAIROBI

Mr van Someren suggests that the writer should make a tape and play it back to the bird - it might get fed up with the sound of its own voice ! (Ed.)

SOCIETY NOTES

Upland Kenya Wild Flowers are back in stock. Apparently the publishers, Oxford University Press, sent copies to the United States and these were not sold. They have come back to roost and members can now purchase copies from the Society's office in the National Museum for Shs 155.00. Cost of the book to non-EANHS members is Shs 200.00. Please order quickly while our rather limited stocks last.

Journal Number 170 is enclosed with this issue of the Bulletin to all full members. This is 'Check-List of the Birds of Tsavo East National Park, Kenya' by P.C. Lack, W. Leuthold and C. Smeenk. Also enclosed is the contents for Journals 120 - 139. Notice to Contributors, for authors intending to submit papers for publication is now available from the Secretary, P.O. Box 44486, NAIROBI.

Copy Needed as usual for the Bulletin. Please send your contributions to the Editor, P.O. Box 44486, NAIROBI.

1980 Eclipse Congratulations to Mr R.G. Timmis who appears to be the only member who witnessed the eclipse. Thank you for your notes, these will be published at a later date. Other members are asked, please, once again to submit their observations.

FOR SALE AND WANTED

For Sale Volumes 1 and 2 of Mackworth-Praed and Grant, The Birds of Eastern and North Eastern Africa. KShs 750/-. Please telephone Karen 2513 or write to C.F. Dewhurst, P.O. Box 30023, NAIROBI

Miss Y. Malcolm-Coe of P.O. Box 48504, NAIROBI has back copies of *Africana* magazine for sale. Please contact her direct.

Wildlife Photography, a field guide by Eric Hosking and John Gooders. Hard-back edition. Price: Shs 80/-
A Field Guide to the Birds of East and Central Africa by J.G. Williams. Price: Shs 100/-
A Field Guide to the National Parks of East Africa by J.G. Williams. Price: Shs 80/-
For the above mentioned three books, please contact the Secretary, P.O. Box 44486, NAIROBI

Wanted Priscilla Allen is in need of companions for bird runs in Nairobi National Park. Would supply car with a season ticket, petrol, coffee (Nescafe) and buns (2 each) in return for help with spotting. Age and sex unimportant but applicants must be interested in birds and willing to start at 06.30 hrs. Please contact :
Miss P.M. Allen, P.O. Box 14166, NAIROBI, 'phone 745740.

SOCIETY'S NEW TELEPHONE NUMBER

Please note that the Secretary can now be contacted on : 742131, 742132, 742133 or 742134, extension 18.

NEW MEMBERS

The following new members have been elected to the Society:

Local Full Members

Mr Mohamed H. Barre, UNDP/FAO, P.O. Box 30218, NAIROBI
Miss Francoise Belmont, P.O. Box 47074, NAIROBI
Mr S.R. Bleazard, P.O. Box 25167, NAIROBI
Mr Victor E.M. Burke, c/o World Bank, P.O. Box 30577, NAIROBI
Ms Elisabeth Butler, Swiss Embassy, P.O. Box 30752, NAIROBI
Miss Jill R.O. Curtis, c/o British High Commission, P.O. Box 30465, NAIROBI
Miss Stephanie Ann Curtis, c/o H.A. Curtis, P.O. Box 10, LIMURU, Kenya
Mrs K.C. Emmanuel, DWA Plantations, P.O. Box 71, KIBWEZI, Kenya
Miss Mary Fleming, P.O. Box 24427, NAIROBI
Dr Volker Haas, P.O. Box 33, NAKURU, Kenya
Miss Sarah Humphreys, c/o British High Commission, P.O. Box 30465, NAIROBI
Manie El-Kindy, P.O. Box 49206, NAIROBI
Miss Ida Miho, P.O. Box 48542, NAIROBI
Mr Raymond Kimweli Mulota, P.O. Box 208, NUNGUNI, via Machakos, Kenya
Mr David Obura, P.O. Box 47508, NAIROBI
Ms Margaret Pattinson, Christian Industrial Training Centre, Secretarial College, P.O. Box 1437, KISUMU, Kenya
Mr J.R. Ringshall, P.O. Box 43233, NAIROBI
Mrs June Shaw, P.O. Box 47252, NAIROBI
Mr Orme-Smith, P.O. Box 78, NANYUKI, Kenya
Mr B. Salwegter, Kapchorma Tea Co. Ltd., P.O. Box 12, NANDI HILLS, Kenya
Mrs Carla K. Stoneberg, P.O. Box 47596, NAIROBI
Ms Ruth Thomas, P.O. Box 14893, NAIROBI
Dr and Mrs D. Wagner, P.O. Box 14103, NAIROBI

Local Junior Members

Peter M. Maina, P.O. Box 42171, NAIROBI
Regina Mugwe, P.O. Box 42171, NAIROBI
Nimrod Mulei, P.O. Box 42171, NAIROBI
Jane N. Ngotho, P.O. Box 42171, NAIROBI
Jacqueline N. Omanga, P.O. Box 42171, NAIROBI

Overseas Full Members

Gordon K. Davis Jr., 2618 NE 86th St., Seattle, Wa 98115, U.S.A.
Dr Ewald Muller, Nauklerstr. 18, D-74 Tubingen, West Germany
Marc Weinberger, New York Medical College, VALHALLA, New York 10595, U.S.A.

SOCIETY FUNCTIONS

Sunday 13th July 1980 Field Excursion to Embakasi Gorges. (This field trip had to be cancelled in June owing to exceptionally heavy rain in the area) Please meet at the National Museum, Nairobi, at 9 a.m. sharp bringing a picnic lunch and be prepared for walking. Birds and botany will be the main interest.

Monday 14th July 1980 at 5.30 p.m. at the Museum, Nairobi (Change of programme) Dr John Gerhart will give a guided tour of the Museum bird gallery. Please meet at the bird gallery at 5.30 sharp.

Monday 11th August 1980 in the Museum Hall, Nairobi, 5.30 p.m. the film 'BLOODY IVORY' kindly lent by the Wildlife Clubs of Kenya.

Sunday 24th August 1980 Birdwatching, botany and walking at Lukenya by kind permission of the Mountain Club of Kenya. Please meet at the National Museum, Nairobi at 9 a.m. sharp bringing a picnic lunch.

Monday 8th September 1980 at 5.30 p.m. in the Museum Hall, Nairobi. Dr David Pearson will give a lecture on 'Ringing Activities at Ngulia'.

September 20th/21st 1980 Week-end field trip to Mount Suswa. Leaders: Mr R. MacGregor and Mr B. Muckle. Please meet at 10. a.m. sharp on Saturday 20th at the junction of the tarmac Kijabe/Narok road with the earth Ngong road just past the Satelite Station (this road to Ngong is signposted). Members wishing to take part in this excursion should bring all camping equipment, food and water as well as petrol for the return journey. Vehicles with high clearance and powerful bottom gear are necessary; the road is very rough. As firewood may be scarce, members should bring stoves for cooking. It is intended to camp in the crater and explore the vicinity.

Monday 13th October 1980 Lecture to be announced.

October 18th - 20th 1980 Camping field trip to 'Kentrout', Timau. Leader, Mrs Daphne Curtis. Details later.

Wednesday Morning Bird Walks - please meet at the National Museum at 08.45 hrs each Wednesday, rain or shine !

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
~~SI~~
NH

CX

EANHS

BULLETIN

SMITHSONIAN
JUN 19 1981
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

EANHS BULLETIN SEPTEMBER/OCTOBER 1980

CONTENTS

Characteristics of some Cowries from Dar es Salaam and Zanzibar 76
Interaction between Bat-eared Fox and Silver-backed Jackel 79
Preliminary observations on flowering times of some Angiospermous Dicots 80
Some observations on birds in the Jadini Forest 81
Parasitic behaviour of the Red-chested Cuckoo 82
Bathing Drongos 82
New sub-species of Crested Mangabey - a comment 82
Breeding Seasons of East African Birds 83
Obituary - Dr Peter R.O. Bally 84
For sale and wanted 84
Society Notes 85
New Members 87
Society Functions 88

CHARACTERISTICS OF SOME COWRIES FROM DAR ES SALAAM AND ZANZIBAR

Of the 49 species of cowries known to occur in the waters around Zanzibar and the nearby coast of mainland Tanzania, many hold consistently true to the generally-described characteristics of the species, both in the animal and in the shell. Among the cowries collected by my wife and myself in Zanzibar and Dar es Salaam, however, are several which differ from the norm. A few words about these may be of interest to other East African collectors.

Cypraea argus The size range of this species is considerable. We found mature shells ranging from 47.0mm to 94.6mm. The type *contrastriata* as illustrated by Burgess (1970) is normally found in the Dar es Salaam area but *argus argus*, with a greater profusion of "eyes" also occurs, as well as degrees between.

C. asellus One Zanzibar specimen (19.8mm), found empty but in mint condition, has bright rust bands on an ivory ground. The base is also ivory, rather than white. This may be a colour variation. Other specimens that I have seen that have been found empty, even when in a fairly eroded condition, had normal dark brown or black bands on a white ground.

C. caurica Several species of cowrie occur underneath and in the vicinity of the main Dar es Salaam sewer pipe that empties near the harbour entrance. Here are to be found some unusually coloured cowries, *C. caurica* included, probably caused by their chemically potent environment. When fresh, *C. caurica* specimens from the sewer pipe usually have a very dark dorsum (sometimes nearly black) and very dark purple margins, extremities and interstices between the teeth.

The shell of one heavy Zanzibar specimen of *C. caurica* was a distinctive robin's egg blue when fresh, with very little brown speckling. It has faded to a very pale blue and the speckling has become more evident.

In several Dar es Salaam specimens the animal, foot and crawling surface were pale yellow. The tentacles were orange.

C. chinensis Shells from the area are richly coloured. A purple columellar blotch occasionally appears at the base. This species comes in a variety of shapes, varying from quite depressed, oval specimens to elongated shells with little callus. *C. chinensis* has a bright red mantle, orange tentacles, and a salmon siphon. The mantle has many short, orange-red papillae with pale tips, and it is usually variegated with small, paler or whitish blotches. The top of the foot, also red, has whitish spots, and the crawling surface is salmon.

C. clandestina In fresh shells the three bands on the dorsum are a medium to fairly dark shade of purple. These bands rapidly fade into a pale grey with a pink tinge. The black mantle has fine sparse papillae that are usually whitish.

C. contaminata The animals, including the mantles, of live Dar es Salaam specimens were a cafe au lait colour with a lilac tinge.

C. cribraria The dorsum is usually either dark brown with pale grey spots or reddish-brown with white or pink spots. Some very small specimens from Zanzibar (less than 15mm) have a bright golden brown dorsum with white spots. The spots of all specimens I have seen from the area are proportionately small.

C. diluculum and *C. diluculum virginalis* Distinctions between the average shell of *C. diluculum* and the variety *virginalis* appear to be superficial but generally constant.

C. d. diluculum The usual *diluculum* has a partial dark band across the anterior terminal. The base and margins normally have dark spots but these may be very sparse and absent from either the base or margin, but not both. A variety of combinations is possible. One *diluculum* may have a prominent band across the anterior terminal, no spots on the base and faint spots on the margins. Another may have a weak anterior terminal band but very conspicuous basal and marginal spotting, and so forth.

C. d. virginalis I have seen no shell considered to be *virginalis* that had any trace of a dark band across the anterior terminal. But we have one specimen without this band which has four very faint spots on the base near the posterior columellar callus.

By shape, marking and colouring I find no significant differences between *C. d. diluculum* and *virginalis*. They occur in the same localities. On the basis of the shells, at least, there appears to be no justification for regarding *virginalis* as a distinct variety of *C. diluculum*.

C. erosa Considerable variation is evident even in small series of this species from Zanzibar and Dar es Salaam. Normally the purple side blotches are evident, extending over the columellar callus and the labial callus (both of which are prominent) onto the base. Dar es Salaam sewer pipe specimens may have the purple blotch spread over much of the base on the columellar half. Some *C. erosa* are proportionately longer than the average and are narrower, have little callus and no lateral blotches at all. These are light shells and might in time have developed further. Some equally light shells, however, have at least the lateral blotches.

C. globulus The usual *globulus* is a medium shade of orange with faint brown spots. We found one live specimen that is a light ivory colour and another that is light olive. The animal in both cases were normally coloured.

C. histrio The dorsum is usually humped but we have a few shells from Zanzibar that are not. One Zanzibar shell had no spire blotch, but the blotch was present in all other specimens I have seen from the area. The shells can be quite dark or light in colour, depending on the size of the reticulations and the density and shade of the intervening markings.

The colour of the mantle varies from brown to reddish-brown and is translucent. The large number of small papillae give the mantle a hairy appearance underwater. One Dar es Salaam specimen had a dull orange-red mantle with discrete grey spots. The foot and the animal of this specimen were mixed salmon and grey.

C. helvola The occasional small specimen turns up that is apparently mature by virtue of development of the teeth, but which is much unlike the average C. helvola. This type is pyriform and has a comparatively weakly developed callus. We have one specimen (16.0mm) with a greenish-grey dorsum partially marked with tiny and very faint pale spots and a small number of larger brown spots.

C. lamarckii Shells from the Dar es Salaam sewer pipe generally parellel the colour development of C. caurica as described above. The dorsum is moderately dark, especially when fresh, and there are faint embryonal bands. The base and interstices between the teeth are tinged with purple in varying degrees.

C. limacina and C. staphylaea These two species, if indeed they are seperate species, are most conveniently considered together. It is simple enough to recognise the average C. limacina or C. staphylaea but difficulties arise from the shells that fall between, mixing the characteristics of both.

Perhaps the most confusing example is an elongated Zanzibar shell (19.5mm) with a smooth black dorsum with a large number of very fine, pale dots. The teeth are well developed and stretch fully across the base.

The animal of a Dar es Salaam shell that fit the characteristics of C. staphylaea had an orange mantle and foot. The crawling surface was pale orange. The papillae of the mantle were unbranched.

C. onyx There is some variation in this species in the Zanzibar - Dar es Salaam area, which is said to fall within the range of C. onyx adusta. Most specimens hold true to the dorsal characteristics of adusta although even in the darkest specimens two faint bands may sometimes be seen crossing the dorsum. We collected a shell live in Zanzibar with much of the dorsum a blend of lavender and grey.

C. owenii One rather small specimen from Dar es Salaam (15.0mm) is quite depressed with prominant callus on both margins. This contrasts with the more pyriform shells found in Zanzibar. The juvenile C. owenii has a blue shell with several bands of regular, square, dark blotches.

REFERENCE:

Burgess, C.M., M.D. The Living Cowries. New York; A.S. Barnes and Company. 1970.

David C. Halsted, P.O. Box 7007, KAMPALA, Uganda

INTERACTION BETWEEN BAT-EARED FOX AND SILVER-BACKED JACKEL

On 21st July 1980 I had departed from Laurence Frank's Hyaena Research Camp on the Telek River north of the Olemelepo Gate of the Masai Mara Game Reserve, to track some of our collared hyaenas by radio telemetry. Beginning at 18.15 hrs I witnessed the following interaction between a jackel, Canis mesomela and five Bat-eared Foxes, Otocyon megalotis.

The foxes had been foraging for insects along the track leading to our camp but turned off into the long grass, heading south. A jackel came into view momentarily, heading north in the direction of the foraging foxes. The jackel disappeared from view into the tall grass but suddenly burst out of the grass in hot persuit of a zig-zagging and yipping fox. Seconds later three of the foxes, the hair on their tails erected and their tails arched in a semi-circle over their backs, charged out of the grass towards the jackel and persued the fox. The jackel broke off its chase and ran off, with the three foxes, still side by side, now in persuit of the jackel. They chased it only about 10 metres and then turned back. The fifth fox, its tail similarly expanded and bent over its back, only then ran up. The five foxes, now reunited, clustered around each other in a clearing for mutual grooming. The jackel meanwhile circled around and passed near the foxes again, but this time kept looking straight ahead. The foxes all jumped up and took a few running steps towards the jackel, their tails all bent over their backs again, but quickly returned to the clearing and groomed as the jackel kept on going. After another few minutes, the foxes departed to resume foraging.

In the space of two days in August, I found two Bat-eared Foxes victims of predation. I came upon the first one at 06.55 hrs on 11th August. A Lappet-faced Vulture, Aegypius tracheliotus and a Tawny Eagle, Aquila rapax, were by the carcase and an immature Martial Eagle, Polemaetus bellicosus, was perched on an adjacent tree. The adult fox had lost its ears and eyes and had been eviscerated. I collected the skull for James Malcomb who is studying the foxes in this area, on the plain between Olemelepo and Telek Gates.

Two days later, in the same area, I witnessed predation on a fox by three Masai dogs. On both the 10th and 11th August, Masai herdsmen had been well within the game reserve stampeding wildebeest south and away from the Telek River. On the morning of 13th August at 07.37 hrs, five Masai teenagers forced an adult female Bat-eared Fox from a hole with their spears and their dogs immediately set out after it. Before I could reach the scene and drive off the dogs, the fox suffered mortal wounds to its head and chest and it died at 07.58 hrs. I collected the animal. Dissection revealed a stomach full of insect parts and bits of grass. These, along with the rest of the intestinal tract, reproductive tract and ectoparasites removed from the hide were preserved. These parts plus the skull and skin have been added to the Malcomb fox study.

Mr G. Ken Davis, 2618 NE 86th St.,
SEATTLE, Wa. 98115, U.S.A.

PRELIMINARY OBSERVATIONS ON FLOWERING TIMES OF SOME ANGIOSPERMOUS DICOTS

Since June 1979, I have been observing the flowering times of some angiospermous dicots in areas I visit. The provinces visited include Rift Valley, Nyanza, Western and Nairobi. To help me note the times well, I designed a form on which I wrote the botanical name of the plant that interested me. They were all picked haphazardly, in fact, as long as one was found flowering and the name was known, the species was used. Each month the plant belonging to a certain species was observed flowering and the month box was ticked. Under the column 'comments' additional notes were recorded and these included precocity, shape of fruit etc.

Such a study on our flowering plants is important in horticulture, apiculture and forestry. Knowing when the plant flowers and how long it takes to have all flowers buds maturing into fruits will help us to select the ornamental trees, shrubs and herbs. It will also help us to know how long a certain type of honey will be available, e.g. 'Dombeya honey' or 'Acacia honey'. The study gave us handy information on when to pick fruits for propagation of forest trees.

My observations revealed that the observed plants could be divided into six groups :-

(a) Plant species which flowered between August and January. In this group were Faurea saligna, Acacia albida (apple ring), Hedera helix (English ivy), Euphorbia candellabrum and Fraxinus berliandiarana (Mexican green ash). Over sixty species were observed and this group was represented by twenty.

(b) Plant species that flowered between August and June had such plants as Cape chestnut Calodendrum capense, Sterculia acerifolia, Dombeya rotundifolia and a number of Acacia spp. It was the leading group.

(c) In this group the plants which were included were found flowering between January and June. Some of them were Indian cherry, Prunus paddus, Rhus spp., Erythrina abyssinica and Croton macrostachyus. C. macrostachyus was placed here while C. megalocarpus was in the second group since the former flowers later than the latter. Similarly, Erythrina caffra fell in group (b) and E. abyssinica in group (c).

(d) Those plants that were included in this fourth group had a very short flowering time span. In some cases, flowers formed and dried immediately and fruits formed within the same month. But those that stretched up to four months were also included. They are Turrea robusta, Ficicum decipiens, Toona ciliata, Cotonoester pannosa, Dodonea viscosa, Ekebergia ruppeliana, Faurea saligna and Fagara chalybea.

(e) Those included in the fifth group were found flowering all the time. Among them are Fuchsia arborea, F. magellanica, Datura suaveolens, Acacia mearnsii, A. podalyrifolia, Schinus molle (pepper tree), Hibiscus spp and Salvia spp. It should be noted that all these are ornamental plants.

EAST AFRICA NATURAL HISTORY SOCIETY

P.O. Box 44486 NAIROBI KENYA

Catalogue of reprints available from the Journal of the East Africa Natural History Society and National Museum, unless otherwise stated. This list cancells any previous list published by the Society. Prices are in Kenya Shillings. July 1980

- - - * - - -

Author	GEOLOGY	No.	Year	PRICE
Coryndon, S.C.	A technique for developing fossils from the matrix in which they are embedded	100	1959	1.00
Pulfrey, W.	The nature and origin of a soap-stone from near Kisii	85/6	1946	2.00
" "	A Kenya Alnoite and associated Skarns	93	1953	2.00
Richard, J.J.	Volcanological observations in East Africa - 1948 eruption of Kituro Nyefunzi	89	1948	1.00
	ECOLOGY & MISCELLANEOUS			
Andrews, P., Groves, C.P. & Horne, J.F.M.	Ecology of the Lower Tana River flood plain (Kenya)	151	1975	7.00
Balfour-Brown, J.	A contribution to the study of the fauna of Ukerewe Island, Victoria, Nyanza	81/2	1944	2.00
Dalton, M.	On the Northern Uaso Nyiro	94	1953	1.00
Hale Carpenter, G.D.	The Geographical Distribution of Animals	22	1925	5.00
Percy, Lord R.C. & Ridley, M.W.	The waterholes at Ijara	93	1953	3.00
	BOTANY			
Agnew, A.D.Q. & Hedburg, O.	Geocarpy as an adaptation of arfo-alpine solifluction soils	118	1969	1.00
Ament, J.C.	The vascular plants of Meru National Park, Kenya	154	1975	8.00
Andrews, P.	Vegetation of Rusinga Island	142	1973	2.00
Bally, P.R.O.	Coryndon Museum Expedition to the Mau Forest. 1. Botanist's Diary	87/8	1946	3.00
" "	Tree-Euphorbias as Timber Trees	95	1954	2.00
Beckley, V.A.	Some symptoms of plant nutrient deficiencies in coffee trees	38/9	1930	1.00
Copley, G.C., Tweedie, E.M. & Carroll, E.W.	Key and Check-list of Kenya Orchids. Part 2 Journal only	109	1964	20.00

Author		No.	Year	PRICE
Dring, D.M. & Rayner, R.W.	Some Gastromycetes from Eastern Africa	114	1967	10.00
Ebbles, D.L.	Additions to the microflora of South-western Uganda	133	1972	2.00
Gillett, J.B.	The identification of Aloes in East Africa	114	1967	4.00
Greenway, P.J.	A Check-list of plants recorded in Tsavo National Park, East, Kenya	118	1969	15.00
Greenway, P.J. & Vesey-FitzGerald, D.F.	Annotated Check-list of plants occuring in Lake Manyara National Park	130	1972	7.00
Haines, R.W.	Prophylls and branching in Cyperaceae	113	1966	7.00
Hennings, R.O.	Field Notes on Stapelicae in Laikipia - Samburu District	87/8	1946	1.00
Isaac, F.M.	Marine Botany of the Kenya Coast. Parts 3 & 4 (Journal)	116	1968	20.00
Isaac, W.E.	Marine Botany of the Kenya Coast. Part 1 (Journal)	114	1967	25.00
	Part 2 (Reprint)	116	1968	5.00
	Part 5	122	1971	5.00
Knutzen, J. & Jaasund, E.	Notes on Littoral Algae from Mombasa, Kenya	168	1979	8.00
Lind, E.M.	The Phytoplankton of some Kenya waters	111	1965	4.00
Mabberly, D.J.	Notes on the vegetation of the Cherangani Hills, N.W. Kenya	150	1975	5.00
Modha, K.L.	Shallow soils and their vegetation in the region of Nairobi, Kenya	119	1970	2.00
* Moorjani, S.A.	Notes on Kenya Acetabularia Lamauroux (Chlorophyta)	119	1970	2.00
Napper, D.M.	Cyperaceae in East Africa. Part 1 (Journal only)	106	1963	15.00
	Part 2 (Journal only)	109	1964	20.00
	Part 3 (Journal only)	110	1965	20.00
	Part 4 (Journal only)	113	1966	20.00
	Part 5	124	1971	15.00
Reynolds, G.W.	Notes on Aloes of South Ethiopia and Somalia	95	1954	2.00
Tweedie, E.M.	Periodic flowering of some Acanthaceae on Mt. Elgon	111	1965	1.00
* Tweedie, E.M. & Agnew, A.D.Q.	The Lugard Plant Collection	119	1970	1.00
Verdcourt, B.	Mudworts in Kenya	94	1953	1.00
" "	East African Plantains	108	1964	1.00

Author	INSECTS	No.	Year.	PRICE
Cameron, M.	New species of African Staphylinidae (Coleoptera)			
	Part 1	89	1948	3.00
	Part 2	90	1950	3.00
Carcasson, R.H.	The Milkweed butterflies of East Africa. (Lepidoptera: Danaidae)	106	1963	5.00
" "	New butterflies from the Kigoma area of western Tanganyika	108	1964	7.00
" "	New African Moths	109	1964	7.00
" "	New Lepidoptera from East Africa	111	1965	10.00
" "	Revised catalogue of the African Sphingidae (Lepidoptera) with descriptions of East African species. Classey reprint, 2nd edition	115	1976	50.00
Evans, R.T.	East African butterflies. Genus Pseudoneptis, Catuna, Pseudargynnis, Pseudacraea, Neptis	85/6	1946	10.00
Flux, J.E.C.	Migration of butterflies, Clycesthia aurota, Catopsilia florella and Crenis occidentalum in East Africa in 1967/8	119	1970	1.00
" "	Seasonal and regional abundance of fleas on hares in Kenya	135	1972	2.00
Gedye, A.F.J.	Coryndon Memorial Museum Expedition to the Chyulu Hills:			
	Part 6 Coleoptera 1	66/7	1940	5.00
	Part 10 Coleoptera 3	77/8	1943	5.00
Haldane, L.A.	Notes on some butterflies of the Ngara District of Tanzania with a list of those recorded	118	1969	2.00
Harmsen, R.	Distribution and host specificity of a number of fleas collected in South and Central Kenya	117	1969	2.00
Heie, O.E.	Notes on some East African Aphids. (Homoptera:Aphidoidea)	155	1975	1.00
Hopkins, G.H.E.	New East African Tricholipeurus (Mallophaga)	70	1941	2.00
Horn, W.	On two new races of Cicindelinae from Kenya Colony with notes on others	62/3	1939	2.00
Jabbal, I. & Harmsen, R.	Curculionidae (Weevils) of the alpine zone of Mt. Kenya	117	1968	5.00
Jackson, T.H.E.	Notes on the Rhopalocera of the Kigezi District of Uganda with descriptions of new species and sub-species	98	1956	10.00

	Author		No.	Year	PRICE
	Kevan, Mc. E.D.K.	New species of Parasphene: Bolivar 1884 (Orthoptera: Acridedae:Pyrgomorphinae)	87/8	1946	5.00
	" "	Orthoptera from the hills of South East Kenya	89	1948	10.00
	" "	Further records of Orthoptera from the Turkana Desert	89	1948	1.00
*	Marshall, Sir G.A.K.	New East African Curculionidae Parts 1 & 2	79/80	1944	10.00
	" "	New East African Curculionidae	89	1948	10.00
	Marson, J.E.	The Ant Mimic: *Myrmarachne plataleoides*	85/6	1946	1.00
*	Munro, H.K.	Some new Trypetidae from Kenya Colony	61	1938	2.00
*	" "	Some new Trypetidae from Chyulu Hills	65	1939	2.00
	Phipps, J.	A small outbreak of *Euproctis rubricosta* Fawcett (Lepidoptera: Lymantriidae) in the eastern province of Tanganyika	94	1953	1.00
	Pinhey, E.C.G.	Common names of moths: another view	95	1954	1.00
	" "	The Emperor moths of Eastern Africa	98	1956	10.00
	Schmidt, G.	Records of parasitic Nematodes in Kenya	117	1969	1.00
	Sempala, S.D.K.	Observations on butterfly migration at Entebbe, Uganda	119	1970	1.00
	Stockley, C.H.	Some East African Hawk moths	93	1953	2.00
	Storace, L.	A new sub-species of *Papilio phorcas* Cramer (Lepidoptera: Papilionidae)	110	1965	1.00
*	Tams, W.H.T.	Three new East African moths	59/60	1937	2.00
	Tonnoir, A.L.	New *Psychoda* from Kenya Colony (Chyulu Hills)	65	1939	1.00
*	Townsend, A.L.H.	Further notes on the early stages of Heterocera bred in the Nakuru district	61	1938	4.00
*		No. 4	81/2	1945	4.00
*	" "	English names of Kenya moths	95	1954	1.00
*	Uvarov, B.P.	New Grasshopper (Orthoptera: Acrididae) from Kenya	70	1941	2.00
	van Someren, V.G.L.	New and little known Lepidoptera from Kenya and Uganda	664	1939	5.00
*	van Someren, V.G.L. & Rogers, Rev. K. St. A.	The butterflies of Kenya and Uganda Vol. 1 Part 1	21	1925	25.00
		Vol. 1 Part 2	23	1925	25.00
*	van Someren, V.G.L.	The butterflies of Kenya and Uganda Vol. 2 Part 2	65	1939	25.00
	Whalley, P.E.S.	A new genus and species of Pyralinae from Africa. (Lepidoptera:Pyralidae)	109	1964	2.00

	Author	OTHER INVERTEBRATES	No.	Year	PRICE
	Bailey, R.M. & Crichton, M.	Freshwater prawns of the genus *Macrobrachium* (Crustacea: Palaemonidae) in East Africa with a key for their identification and notes on their exploitation	120	1971	2.00
	Berry, L.E.	Africa's rarest cowrie	95	1954	1.00
	Bruce, A.J.	The occurrence of the shrimp *Metapontia fungiacola* Bruce (Crustacea:Decapoda:Pontoniidae) in Kenya waters	134	1972	2.00
	" "	Abbreviated larval development in the Alpheid shrimp, *Racilius compressus* Paulson	147	1974	2.00
	Din, N.A.	Observations on reproduction, aestivation and polymorphism in the snail, *Limicolaria martensiana* Smith from the Queen Elizabeth National Park, Uganda	127	1971	1.00
	Ogambo-Ongoma, A.H. & Cararis, A.G.	*Parorchis avitus* (Linton 1914)	121	1971	1.00
	Osborne, J.F.	Further notes on Cowries of the coasts of Kenya and Tanzania	164	1977	5.00
	Robson, E.	Notes on East African Cowries	112	1966	1.00
*	Verdcourt, B.	The study of snails and slugs in East Africa	94	1953	1.00
*	" "	The Cowries of the East African Coast	96	1954	25.00
		Supplement No. 1	97	1955	1.00
		Supplement No. 2 (Journal)	100	1959	10.00
		Supplement No. 3	104	1960	4.00
	" "	Scorpion Shells	100	1959	1.00
*	" "	Report on a collection of East African slugs	105	1962	3.00
	" "	A third species of *Nesopupa* (Mollusca:Pupillidae) in Kenya	108	1964	1.00
	" "	The genus *Maizania* Bgt. (Gastropoda:Maizaniidae) in Eastern Africa	109	1964	5.00
	Yaninek, J.S.	Survey of Gastropod populations at Diani and at Malindi Marine National Parks, Kenya	159	1976	5.00
	" "	A Comparative Survey of Reef Associated Gastropods at Maziwi Island, Tanzania	165	1978	7.00

Author	FISH	No.	Year	PRICE
Bock, K.R.	Preliminary check list of lagoonal fishes of Diani, Kenya	137	1972	2.00
" "	Preliminary check list of the fishes of the south bank, Kilifi Creek, Kenya	148	1975	3.00
Copley, H.	*Holacanthus semicirculatus*	51/2	1936	1.00
" "	The introduction of the American Brook Trout *Salvelinus fontinalis* to Kenya	93	1953	1.00
" "	The *Tilapia* fisheries of the Kavirondo Gulf	94	1953	1.00
Losse, G.F.	Check list of Elopoid and Clupeoid fishes in East African coastal waters	112	1966	2.00
" "	Elopoid and Clupeoid fishes in East African coastal waters	117	1968	6.00
" "	*Rhinoptera javanica* Muller and Henle from Kenya waters (Pisces: Rhinopteridae)	113	1966	1.00
Okera, W.	An analysis of the features of *Sardinella gibbosa* (Bleeker) scales with special reference to the problem of age determination	119	1970	3.00
van Someren, V.D.	A note on the food of young Bluegill Sunfish, *Lepomis macrochirus*	85/6	1946	1.00

REPTILES & AMPHIBIANS

Ashe, J.O.P.	Observations on Gunther's Garter or Coral Snake, *Elapsoidea sundevalii guntheri* Loveridge	111	1965	1.00
" "	First record of snake from Uganda, *Rhamphiopsis acutus acutus* Gunther	111	1965	1.00
" "	A new bush viper	116	1968	1.00
Canaris, A.G. & Murphy, D.G.	A scincid reptile feeding primarily on marine Crustacea with a note on its parasites	111	1965	1.00
Drewes, R.C.	Notes on the distribution of *Holodactylus africanus*	126	1971	1.00
Drewes, R.C. & Sacherer, J.M.	A new population of Carpet Vipers, *Echis carinatus* from northern Kenya	145	1974	2.00
Duff-MacKay, A.	Notes on the biology of the Carpet Viper, *Echis carinatus pyramidum* (Geoffroy) in the Northern Frontier Province of Kenya	110	1965	3.00

Author		No.	Year	PRICE
Duff-MacKay, A. & Schiotz, A.	A new *Hyperolius* (Amphibia: Anura) from Kenya	128	1971	1.00
Ionides, C.J.P. & Pitman, C.R.S.	Notes on two East African snake populations - *Echis carinatus pyramidum* (Geoffroy): Egyptian Saw-Scaled Viper and *Vipera hindii* (Boulenger): Montane Viper	111	1965	3.00
Ionides C.J.P. & Orme-Smith, C.	A trip to Al Aber, Quati State, Hadamaut, East Aden Protectorate	111	1965	1.00
Loveridge, A.	The Green and Black Mambas of East Africa	89	1948	1.00
" "	History and habits of the East African Bullfrog	89	1948	1.00
" "	On a second collection of reptiles and amphibians taken in Tanganyika Territory by C.J.P. Ionides	97	1955	8.00
" "	An East African Gecko colonising Ascension Island	104	1960	1.00
Pitman, C.R.S.	Hood-spreading by the members of the African genus *Dendroaspis*	111	1965	2.00
" "	Some additional field notes on *Vipera hindii* Boulenger received from C.J.P. Ionides on 15th November 1964 (Journal)	111	1965	20.00
Urban, E.K.	Notes on a collection of amphibians from Ethiopia	114	1967	1.00
van Someren, V.G.L.	Coryndon Museum Expedition to the Chyulu Hills. Notes on the Herpetafauna Part 4	64	1939	5.00
Spawls, S.	A Check list of the Snakes of Kenya	167	1978	8.00
Vesey-FitzGerald, D.F.	A Guide to the Snakes of the Tanzania and Kenya borderlands	149	1975	10.00
Wood, J.A.	Some notes on *Xenopus laevis* Daudin (Amphibia:Pipidae)	110	1965	2.00

BIRDS

Ash, J.S.	Great Black-headed Gulls and Red-necked Phalaropes inland in Ethiopia	162	1977	5.00

East African Bird Ringing Reports

Carter, A. & Blencowe, E.J.	1960	104	1960	1.00
Smart, J.	1961 - 1966	114	1967	2.00
Backhurst, G.C.	1967 - 1968	118	1969	4.00
" "	1968 - 1969	119	1970	4.00
" "	1969 - 1970	123	1971	4.00
" "	1970 - 1971	136	1972	4.00
" "	1971 - 1972	144	1973	4.00

Author		No.	Year	PRICE
	East African Bird Ringing Reports cont.			
Backhurst, G.C.	1972 - 1973 1973 - 1974	146	1974	3.00
" "	1974 - 1977	163	1977	4.00
Backhurst, G.C. Britton, P.L. & Mann, C.F.	The less common Palaearctic migrant birds of Kenya and Tanzania	140	1973	9.00
Baxter, R.M., Urban, E.K. & Brown, L.H.	A nineteenth Century reference to the use of tools by the Egyptian Vulture	118	1969	1.00
Beals, E.W.	Sight additions to the avifauna list of Ethiopia	112	1966	2.00
Beesley, J.S.	Birds of Arusha National Park, Tanzania	132	1972	5.00
Britton, P.L. & Sugg, M. St. J.	Birds recorded on the Kimilili track, Mt Elgon, Kenya	143	1973	2.00
Britton, P.L. & Zimmerman, D.A.	The Avifauna of Sokoke Forest, Kenya	169	1979	15.00
Brown, L.H.	The breeding of Lesser and Greater Flamingoes in East Africa	97	1955	2.00
" "	Red-wing Starlings in Kenya	110	1965	5.00
" "	Observations on Verreaux's Eagle Owl, *Bubo lacteus* (Temminck) in Kenya	111	1965	2.00
Brown, L.H. & Bursell, G.	A first breeding record of the Cuckoo Falcon in Kenya	116	1968	1.00
* Burke, V.E.M.	The African Pitta, *Pitta angolensis*	118	1969	1.00
" "	A count of Crowned Cranes, *Balaerica regularum* (Bennett) in the Kisii District, Kenya	111	1965	1.00
Douthwaite, R.J.	Breeding Biology of the Pied Kingfisher, *Ceryle rudis*, on Lake Victoria	166	1978	5.00
Elliott, C.C.H.	An ornithological survey of the Kidepo National Park, northern Uganda	129	1972	8.00
Evans, J.R.H.	Some notes on Lovebirds, *Agapornis*	109	1964	1.00
Friedmann, H. & Williams, J.G.	The birds of Budongo Forest, Bunyoro Province, Uganda	141	1973	5.00
Guichard, K.M.	A summary of the birds of the Addis Ababa region, Ethiopia	89	1950	5.00
Gwahaba, J.J.	A contribution to the biology of the Pied Crow, *Corvus albus* (Muller) in Uganda	153	1975	4.00

	Author		No.	Year	PRICE
*	Hall, J.R.	Observations on colonial breeding in the Black-headed Weaver and Vieillot's Black Weaver	119	1970	2.00
	" "	Data from a colony of Vieillot's Black Weavers, _Melanopteryx_ (_Ploceus_) _nigerrimus_ Vieillot	119	1970	1.00
	Hopkins, G.H.E.	Some recent Uganda bird records	87/8	1946	1.00
*	Hull, R.L.	The names of some birds in several Nyanza languages	70	1941	2.00
	Lack, P.C., Leuthold, W & Smeenk, C.	Check list of the birds of Tsavo East National Park, Kenya	170	1980	15.00
	Laurie, W.A.	The food of the Barn Owl in the Serengeti National Park	125	1971	1.00
	MacInnes, D.G.	An explanation of scientific nomenclature (Ornithological nomenclature)	95	1954	3.00
	Mann, C.F.	The birds of Teso District, Uganda	156	1976	5.00
	" "	Some recent changes in our knowledge of bird distribution in East Africa	157	1976	10.00
	Morgan-Davies, A.M.	A nesting colony of Avocets at Lake Manyara, Tanzania	103	1960	1.00
*	North, M.E.W.	Notes on seabirds of Brava	81/2	1944	2.00
	" "	Breeding of the Black-headed Heron at Nairobi, Kenya 1958 - 1962	106	1963	8.00
*	Owre, O.T.	The Reef Heron, _Egretta schistacea_ (Ehrenberg) in interior East Africa	114	1967	1.00
*	Parsons, B.	Some Makueni birds	101	1959	1.00
	Reynolds, J.F.	Notes on birds observed in the vicinity of Tabora, Tanzania with breeding data	117	1969	5.00
	Ridley, M.W., Moss, B.L. & Percy, Lord R.C.	The food of the flamingo in Kenya	97	1955	5.00
*	Sessions, P.H.B.	Notes on the birds of Lengetia Farm, Mau Narok	113	1966	8.00
	" "	Observations on Mackinder's Eagle Owl, _Bubo capensis mackinderi_ Sharpe, on a Kenya farm	138	1972	5.00
*	Sheppard, D.M.	Bird Notes from Molo. 1 The Dam	95	1954	1.00
	Smart, J.B.	A breeding record for the Sooty Tern in Kenya	110	1965	1.00

	Author		No.	Year	PRICE
	Symmes, T.C.L.	Short notes on the Black Coucal in northern Rhodesia	103	1960	1.00
*	Tennent, J.R.M.	Notes on the birds of Kakamega Forest	111	1965	2.00
	Tomlinson, W.	Bird notes chiefly from the Northern Frontier District of Kenya. Part 1	85/6	1946	5.00
		Part 2	89	1948	7.00
	Tweedie, C.J.	The Paradise Whydah and the Broad-tailed Paradise Whydah	111	1965	1.00
	" "	A list of birds seen in southern Tanzania	112	1966	3.00
	van Someren, G.R.C.	*Vidua fischeri* (Reichenow) parasitic on *Granatina ianthinogaster* (Reichenow)	139	1973	1.00
*	van Someren, V.G.L.	Birds of the Chyulu Hills	62/3	1939	20.00
*	" "	New races of birds from East Africa	37	1931	3.00
		The Birds of Kenya and Uganda			
*	" "	Vol. 1 Part 2	23	1925	25.00
*		Vol. 1 Part 5	29	1927	25.00
*		Vol. 1 Part 6	30	1927	25.00
*		Vol. 1 Part 7	31/2	1928	25.00
*		Vol. 2 Part 1	47/8	1933	25.00
*		Vol. 2 Part 2	49/50	1933	25.00
*		Vol. 2 Part 3	49/50	1933	25.00
*		Vol. 2 Part 4	51/2	1933	25.00
	Williams, J.G.	The identification of Kenya birds of prey in flight: Part 1 Vultures	95	1954	1.00
		Part 2 Falcons, Hobbies, Kestrels and Pygmy Falcon	97	1955	1.00
*	Woodman, H.	Ducks and Geese of the Ethiopian Region	81/2	1945	3.00

Reprints of the following articles by R.E. Moreau are available at Shs 3.00 each :

A note on the distribution of the Vulturine Fish Eagle, *Gypohierax angolensis* Gmel. Journal of Animal Ecology 1933

* Some eco-climatic data for closed evergreen forest in tropical Africa. Amani Memoirs 1935

* Some weights of African and wintering Palaearctic birds. Ibis 1944

Additions to the ornithology of the Mafia group of islands Ibis 1944

* Rensch on the increase of heart weight in relation to body weight with increase in altitude. Ibis 1944

Relations between number of brood, feeding rate and nesting period in nine species of birds in Tanganyika Territory. Journal of Animal Ecology 1947

Reprints by R.E. MOREAU cont. Price Shs 3/- each

Some recent trends and terms in bird taxonomy. Ibis 1948

Aspects of evolution in the Parrot genus Agapornis. Ibis 1948

The breeding of a Paradise Flycatcher. Ibis 1949

with W.M. Moreau. Biological and other notes on some East African Birds. Part 2 Ibis 1937

with A.L. Wilk & W. Rowan. The moult and gonad cycle of three species of birds at five degrees south of the Equator. Proceedings of the Zoological Society of London 1946

Ridley, M.W., Percy, H.E. & Percy, R.C. The birds of Bwamba. Further additions Uganda Journal 1953

Author	MAMMALS	No.	Year	PRICE
Coe, M.J. & Foster, J.B.	The mammals of the northern slopes of Mt. Kenya	131	1972	4.00
Dodds, C.M.	Diseases of stock in Lumbwa District	15	1917	1.00
Grant, W.H.G.	Elephants in the moonlight	93	1953	1.00
Hesse, P.R.	The identification of spoor and dung of East African mammals Part 1 The Antelopes	95	1954	5.00
Jackson, T.H.E.	A bat nursery	64	1939	1.00
King, D.G.	The afro-alpine Grey Duiker of Kilimanjiro	152	1975	4.00
Loveridge, A.	Notes on East African Mammalia (other than horned ungulates) collected or kept in captivity. 1915 - 1919 Part 2	17	1922	10.00
Sale, J.B.	The habitat of the Rock Hyrax	112	1966	3.00
" "	Daily food consumption and mode of ingestion in the Hyrax	112	1966	3.00
Toschi, A.	Two rodents from the Masai Reserve	83/4	1945	2.00
" "	A new rat from Abyssinia	87/8	1946	1.00
	ANTHROPOLOGY AND PALAEONTOLOGY			
Aldridge, M.M.J.	Riverside dwellers of the White Nile	93	1953	1.00
Kirby, P.	Meaning of the name Nakuru	104	1960	1.00
Kirkman, J.	The house of the dhow	93	1953	1.00
MacInnes, D.G.	Notes on East African Miocene primates	77/8	1943	3.00
Matson, A.T. & Hamilton, C.	Bau Petroglyphs. Notes on some newly found Bau Petroglyphs and the Masai name 'Ngeshui'	105	1962	2.00
'Nyangweso'	The cult of Mumbo in central and southern Kavirondo	38/9	1930	1.00

Author		No.	Year	PRICE
* Orchardson, I.Q.	Future development of the Kipsigis with special reference to land tenure	55/6	1935	2.00
Paulian, R.	Three fossil dung beetles (Coleoptera:Scarabaeidae) from the Kenya Miocene	158	1976	2.00
* Wright, A.C.A.	The inter-action of various systems of law and customs in British Somaliland and their relation to social life	75/6	1943	7.00

SPECIAL SUPPLEMENTS

* Loveridge, A.	A check list of the Reptilia recorded from the British Territories in East Africa	3	1924	10.00
Munro, H.K.	Some new Trypetidae from Kenya	5	1937	5.00
Carcasson, R.H.	The Swallowtail Butterflies of East Africa. (Lepidoptera: Papilionidae). Classey reprint 2nd edition	6	(1960) 1975	25.00
Verdcourt, B & Polhill, R.	East African Slugs of the family Urocyclidae	7	1961	10.00

COMPLETE JOURNALS

No.	Year	PRICE	No.	Year	PRICE	No.	Year	PRICE
* 14	1919	20.00	87/8	1946	20.00	102	1960	10.00
* 17	1922	20.00	89	1948	20.00	103	1960	10.00
18	1923	20.00	* 90	1950	30.00	104	1960	10.00
19	1924	15.00	91	1952	15.00	105	1962	20.00
20	1924	15.00	92	1952	10.00	106	1963	15.00
22	1925	25.00	93	1953	10.00	109	1964	20.00
23	1925	25.00	94	1953	10.00	110	1965	20.00
24	1926	15.00	95	1954	10.00	111	1965	20.00
28	1927	15.00	* 96	1954	25.00	112	1966	15.00
35	1929	20.00	97	1955	10.00	113	1966	20.00
37	1930	15.00	98	1956	15.00	114	1967	25.00
44	1932	20.00	99	1958	10.00	116	1968	20.00
* 61	1938	20.00	100	1959	10.00	117	1968	20.00
68/9	1941	20.00	101	1959	10.00	118	1969	25.00
85/6	1946	20.00				* 119	1970	25.00

Reprints and complete journals marked with an asterisk(*) are in very short supply. When ordering please state author, abbreviated title and number.

ADDITION

* Paper read by V.G.L. van Someren and R.A.L. van Someren: Life history of certain African Nymphalid Butterflies of the genus Charaxes. Entomological Society of London. 1926

PRICE: 10.00

(f) In the last group came those that at least shed leaves before or during the flowering time. They included Dombeya rotundifolia, Sterculia acerifolia, Cordia abyssinica, Chorisia speciosa, Erythrina spp, Jacaranda mimosifolia, Tippuana tippu, Millettia dura and Steganotaenia araliacea. This was the smallest group. It is easily inferred that many are ornamental/shade trees and shrubs. Some are highly valuable ornamental plants because of the bright colours of the flowers and their precocious behaviour.

I feel that more observations and conclusive information can still be found if studies are made of individual plants.

P.W. Mumiukha, Egerton College, P.O. NJORO, Kenya

SOME OBSERVATIONS ON BIRDS IN THE JADINI FOREST

We were fortunate to spend five days in a cottage near the south end of Diani Beach, Kenya, in August this year. Each day I went for a walk along the road which cuts through the remnant of the Jadini forest. It was dazzling, as nearly all the birds were different from the common Nairobi species, and every walk held a new surprise.

The regular bird hunting-party on my route was a dramatic sight, led by three bright red-black and white species : five Green Wood-Hoopoes, a pair of Crowned Hornbills and five Retz' Red-billed Shrikes. These striking birds were set off by a half-dozen Black-breasted Glossy Starlings, three Drongoes, three Green Barbets, a Golden-tailed Woodpecker and an African Golden Oriole.

It was startling to see the two hornbills flopping among the branches with the small, active birds, and thrilling to hear the clear, sweet whistles of the Retz' Red-billed Shrikes.

Sometimes the bird hunting-party was augmented by more familiar birds - Golden-rumped Tinker Bird, Yellow-vented Bulbul, Yellow-bellied Greenbul, Black Cuckoo Shrike and Collared Sunbird. Once, the hunting-party was actively joined by a pair of brilliant black and yellow Dark-backed Weavers. Another time, a Red-tailed Ant-Thrush, grey-brown above and orange below, searched briefly for food among the same trees.

There was a variety of birds of prey. A magnificent Crowned-Hawk-Eagle was seen nearly every day, as were its prey, Black and White Colobus and Sykes' monkeys. Other birds of prey seen were African Goshawk, Lizard Buzzard, Cuckoo Falcon, and a Bat Hawk, all dark, flying at great speed with deeply pointed wings. One bird of prey defied identification for a while. It had a white head with grey streaks, white underparts with large black spots, a brown back with white spots on the nape and a brown tail with dark bands. It was probably a sub-adult Ayres' Hawk Eagle.

In the scrub skirting the forest there were White-browed Coucal, Lilac-breasted Roller, Mangrove Kingfisher, Brown-breasted Barbet, Brownbul, Zanzibar Sombre Greenbul, Ashy Flycatcher, Red-capped Robin Chat, Eastern Bearded Scrub Robin and Mouse-coloured Sunbird. Even the swifts flying overhead were unusually Palm Swifts rather than Little Swifts !

Fleur Ng'weno, P.O. Box 42271, NAIROBI

PARASITIC BEHAVIOUR OF THE RED-CHESTED CUCKOO

On a number of consecutive days I recently observed in my garden in Langata, Nairobi, a curious relationship between an immature Red-chested Cuckoo, *Cuculus solitarius*, and a female Ruppell's Robin Chat, *Cossypha semirufa*.

The young cuckoo would remain for the most part immobile whilst emitting a single, continuous, very high-pitched squeak of a distinctly plaintive nature. Meanwhile the somewhat diminutive "parent" busied herself in the seemingly endless task of providing enough food for her extremely persistent foster chick.

Although I believe that this mode of parasitic behaviour is endemic to most species of cuckoo, inclusive of the Red-chested, I would nevertheless be most interested to learn whether this particular choice of foster parent is usual under these circumstances.

David Fuggle, P.O. Box 47058, NAIROBI

BATHING DRONGOS

On 3rd August 1980 I was on the Kafue River near Chingola, Zambia, when I saw two dark birds flying from the overhanging trees, immersing themselves in the river and flying back to their perches. I discovered that there was a group of six Drongos, *Dicrurus adsimilis*, on the tree all drying their wings in the sun.

I have not heard of Drongos doing this and wonder is other readers have made similar observations.

Jean Lock, P.O. Box SK9, NDOLA, Zambia

NEW SUB-SPECIES OF CRESTED MANGABEY - A COMMENT

I was most interested to read the report in the March/April 1980 Bulletin that a new sub-species of crested mangabey had been discovered by Messrs Bulstrode and Rodgers in Tanzania.

What interested me most however, was that the local people know the monkey as *Ngolaga* in Kihehe or *Makakos* in Kipogolo. The latter word could easily be a derivation of the Portugese word *Macaco*, simply meaning "monkey". This connection is not impossible in view of the long Portuguese presence along the coast of East Africa. The 's' after *Makako* would indicate the plural which would be the case if the scientists were observing a group.

Which reminds me of a story my father told me when he had his first meal in Kenya, at the New Stanley Hotel in 1938.

He was served with a delicious fried fish and asked the waiter what the fish was and was told "Samaki". Much impressed by its flavour, and determined to ask for it in future, he wrote the word in his diary only to find out some time later that it mearly meant "fish" !

I would be willing to bet that the Kihehe word Ngolaga means "monkey" in Kihehe, and furthermore, if this crested mangabey is discovered in the forested highlands of neighbouring Mozambique, that the local people will know it as Makakos !

Mr C. Orme-Smith, P.O. Box 78, NANYUKI, Kenya

THE BREEDING SEASONS OF EAST AFRICAN BIRDS

The Breeding Seasons of East African Birds by the late L.H. Brown, and P.L. Britton, published by the Society during August 1980, provides a comprehensive summary of records of bird breeding in East Africa available up to 1976. The work is based largely on the records of the Society Nest Record Scheme, but incorporates additional data from an extensive literature search undertaken by H.A. and P.L. Britton.

For analysis purposes, East Africa (Kenya, Uganda and Tanzania) has been divided into five climatic regions on a basis of rainfall patterns. Over 1100 breeding (or presumed breeding) species are dealt with. A list is provided for those 261 species for which no definite East African records yet exist. The remaining 861 species are dealt with in systematic order, non-passerine accounts have been prepared by L.H.B. and passerine accounts by P.L.B. The number of definite dated breeding records is given for each species, and this is subdivided by climatic region, and broken down month by month, to indicate seasonality and its variation from area to area. Brief comment and conclusions are given for each species.

In a detailed discussion, previous studies on breeding seasonality in the tropics are reviewed. The importance of proximate stimulating factors such as photoperiod, rainfall and vegetative proliferation, and the untimate controlling factors such as food supply, competition, predation and the safety of nesting sites are considered. Also included is a comprehensive account of seasonal food availability as it might relate to East African bird breeding.

In being able to collate such a large number of dated breeding records, and in indicating the variety of complex factors which can determine the timing of nesting, this book sets a precedent in tropical ornithology. Augmented by additional annual reports of the Society Nest Record Scheme which appear in the East African Bird Report, it will undoubtedly serve as a valuable reference work for those interested in seasonality in the tropics, in Africa and elsewhere.

This book is now available from the Secretary, P.O. Box 44486, Nairobi. Price (which includes surface mail postage)
East Africa EANHS members, KShs 80.00, Non-members KShs 105.00
Overseas EANHS members £Stg. 5 or US $ 12, Non-members £Stg 6.50 or US $ 15.

D.J.P.

OBITUARY

DR PETER R.O. BALLY (1895 - 1980)

Dr Bally was born on the 9th May 1895 at the city of Mannheim in Germany but of Swiss family. He studied Chemistry at the University of Zurich in Switzerland and later worked for several chemical firms in Switzerland. He came to the then German East Africa, now Tanzania, in the early 1930s where he worked for a petroleum company. As a chemist, he developed a special interest in African herbal remedies and later published some of his work in this field as 'Heil-und Giftpflanzen der Eingeborenen von Tanganyika", 1938. He moved to Nairobi and joined the then Coryndon Museum, now National Museum, in 1938 where he worked as botanist. During his 20 years' work at the museum, Dr Bally made numerous botanical trips not only in Kenya, but also to Somalia, Ethiopia, Uganda and Tanzania. He became particularly interested in succulent plants and other arid land plants of Eastern Africa. After his retirement from the museum services in 1958, he continued his botanical research in succulents, and in 1961 published a book on the genus Monadenium of the Euphorbiaceae. He collected over 16,000 plant specimens from Eastern Africa, most of them now preserved at the East African Herbarium in Nairobi and at Kew. He was an active naturalist and a member of many scientific organizations among them the East Africa Natural History Society. He served for several years as a member of the Society's Executive Committee, wrote many scientific papers for the Journal and designed several most attractive Journal covers. He was awarded an honorary Doctor of Science degree in the mid 1970s by the University of Bale in Switzerland, in recognition of his scientific achievements. He died in Nairobi on 26th July 1980 and is survived by his wife and two sons, the elder son being a D.Sc. student at Stellenbosch University.

J.O.K.

With great regret and sorrow we announce the death of Dr Leslie Hilton Brown, a long standing member of the Society, so well known for his achievements in the ornithological world. An appreciation will be published in the November/December Bulletin.

FOR SALE AND WANTED

For Sale: Pentax Spotmatic 1000 standard 55 mm lens and Optomax 200 mm lens to fit: cases for both. Offers around Shs 3,000/-. Please contact WATSON, Karen 2438 or 335333.

Wanted: 'Being an ardent bird watcher and very interested in birds at home and abroad I would very much like to exchange letters with any amaaeur watcher to share with them news and views of local watching...' Please contact Ken B. Flaxman, 2 Grange Road, Abbotskerswell, Newton Abbot, Devon, England.

SOCIETY NOTES

The Breeding Seasons of East African Birds

This hard cover book by the late L.H. Brown, and P.L. Britton, published by the Society, is now available. As this unique compilation of tropical bird breeding records is limited to 1,000 copies, members are strongly advised to order their copies as soon as possible. For the convenience of those who cannot visit the Society's office, an order form is enclosed.

Price, which includes surface mail postage :

East Africa	EANHS members	KShs 80.00
	Non-members	KShs 105.00
Overseas	EANHS members	£ Stg. £5 or US $ 12
	Non-members	£ Stg. £6.50 or U.S. $ 15

The Birds of East Africa

According to the latest information from the printers, this book is now being bound and should be available to members early in October. It is understood that copies will be mailed to those who placed advanced orders. Our apologies for the inconvenience caused in the delay in producing the book.

The Birds of Eastern and North Eastern Africa

This two volume classic, now reprinted, has arrived in Kenya. Written by C.W. Mackworth Praed and C.H.B. Grant, it covers all the birds of eastern and north eastern Africa and is an invaluable guide. Those members who ordered copies in advance have now been advised ; others should order their sets from The Secretary, P.O. Box 44486. Nairobi. Special members discount prices are :

Volume 1	KShs 450.00
Volume 2	KShs 540.00
2 Vol. sets	KShs 990.00

Please note that the Society is only ordering the number of books paid for in advance. Postage and packing for the two volumes is :

East Africa KShs 15/- Overseas (surface mail) KShs 20.00

Intertidal Seaweeds in Tanzania. A Field Guide.

This interesting field guide to the east African seaweeds is written by Erik Jaasund. A few more copies have been obtained and are available to members from the Society's office. Price to members : KShs. 40.00, plus KShs 5.00 postage and packing.

Reprint List

At long last we have found the time to produce a Journal reprint list which is enclosed with this issue of the Bulletin to all full members. Orders, please, to the Secretary, P.O. Box 44486, Nairobi.

Bulletin Copy

As usual, Bulletin copy is urgently required. Please send in your observations, comments etc. to the Editor, Mr M. Clifton, P.O. Box 44486, Nairobi. Withour members help we cannot produce a varied and interesting publication.

3rd Annual Nairobi Bird Census

The 3rd annual Nairobi bird census will take place within the Nairobi area on Sunday 23rd November 1980. Organizers : Mrs Fleur Ng'weno and Miss Dennie Angwin. We hope that as many Nairobi members as possible will be able to take part in this important Society event. Please keep the day free; full details will be sent out with the next Bulletin.

Office Closed Saturday Mornings

The Secretaries regret that it is no longer possible to open the Society's office on Saturday mornings, unless specifically requested to do so. We normally have very few visitors and now have school children to look after every weekend. If Saturday morning is the only time you can visit the office, please let the Secretary know in advance on telephone 742131/2/3/4 during normal weekday working hours.

Wildlife Photography - A Field Guide

Two famous photographers, Eric Hosking and John Godders have written this most informative book on wildlife photography. The Society has a second hand copy for sale, Shs 80.00, available from the office.

John Gerhart

It is with regret that we have to say 'Kwa Heri' to John Gerhart, a long standing and active member of the Society and Executive Committee. John helped launch the first Nairobi bird census and organised the second, was a very active member of the Ornithological Sub-Committee and a supporter of all Society activities. We wish him, his wife and family well as they start a new life in Cairo.

STOP PRESS IMPORTANT NOTICE RE.

MT. SUSWA CAMP.

The Mt. Suswa camp, due to take place on 20th/21st September, has had to be cancelled. This is because 'Operation Drake' are in the area carrying out a survey and our presence would disturb them as well as their activities limiting the areas we could visit. Also, we learn that permission has to be obtained from the local Masai to visit the area, and as this has not been obtained, we thought it wise to cancell the trip. We do hope that the camp will take place at a later date, members will be kept informed.

NEW MEMBERS

The following new members have been elected to the Society:

Local Full Members

Mr Clive Briffett, The Kenya Polytechnic, P.O. Box 52428, NAIROBI
Mr and Mrs Broomhead, P.O. Box 47023, NAIROBI
Dr A. Bryceson, P.O. Box 20778, NAIROBI
Ms Betty Chappell, United Kenya Club, Apt. 3, P.O. Box 42220, NAIROBI
Ms Caroline Clark, P.O. Box 44209, NAIROBI
Mrs C.M. Condon, P.O. Box 24999, NAIROBI
Mrs Lorna J. and Mr Jeremy J. Conway, c/o Howard Humphrys (K) Ltd., P.O. Box 30156, NAIROBI
Dr C.L. Coulson, P.O. Box 21410, NAIROBI
Mr Patrick Duff, c/o British High Commission, P.O. Box 30465, NAIROBI
Dr R.J. Fereday, Chemistry Dept., P.O. Box 43844, NAIROBI
Mr and Mrs C.B. George, P.O. Box 25209, NAIROBI
Mr Iain Gordon, c/o Shell & B.P. Services Ltd., P.O. Box 41221, NAIROBI
Mr B. van Helden, P.O. Box 30028, NAIROBI
Mr H.H.M. Hendrickx, c/o UNDP/FAO, Marketing Development Project, P.O. Box 30218, NAIROBI
Miss Julie Horton, Greenacres School Ltd., P.O. Box 46919, NAIROBI
Gerda Johansson, P.O. Box 20723, NAIROBI
Mr Robert H. Jones, c/o UNCHS (Habitat), P.O. Box 67553, NAIROBI
Mrs Hanka Kawecka-Lee, P.O. Box 59861, NAIROBI
Dr Adrian D. Lewis, Geology Dept., P.O. Box 30197, NAIROBI
Dr Anita Mackie, P.O. Box 30261, NAIROBI
Mr and Mrs David B. Meyer, P.O. Box 2657, ELDORET, Kenya
Mrs and Mrs Moseley, P.O. Box 60512, NAIROBI
Mr Ketan Patel, P.O. Box 10284, NAIROBI
Ms Rosemary A. Percival, P.O. Box 40077, NAIROBI
Dr Martin Pickford, P.O. Box 40658, NAIROBI
Ms Carol Price B.A., M.B., P.O. Box 30156, NAIROBI
Mr D.F. Pumfrey, P.O. Box 30037, NAIROBI
Mrs Christine E. Smith, Royal Danish Embassy, P.O. Box 40412, NAIROBI
Ms Jill Sowerby, P.O. Box 45070, NAIROBI
Mr R.F. Tanner, P.O. Box 50381, NAIROBI
Mr Peter Theeman, P.O. Box 47605, NAIROBI
Vivienne and David Tucker, c/o P.O. Box 10222, NAIROBI
Mr C.J. Wilkes, P.O. Box 46578, NAIROBI

Local Junior Members

Harry Gordon Behr, P.O. Box 43360, NAIROBI
Evan Conlee, Flat 2, P.O. Box 40433, NAIROBI
Norreen W. Gitu, P.O. Box 48978, NAIROBI
Milka Karaba, P.O. Box 42171, NAIROBI

Overseas Full Members

Mr E. Coussement, 28 Rue du Greffier, 7761 Evregnies, Belgium
Mr G. O'Donahoe, 575 Boylston St., Boston, Ma 02116, U.S.A.

SOCIETY FUNCTIONS

September 20th/21st 1980 Weekend field trip to Mt Suswa.
*** Please see previous *Bulletin* for details. IMPORTANT: SEE BELOW

Monday 13th October 1980 at 5.30 p.m. in the Museum Hall, Nairobi An illustrated lecture by our Chairman, Mr John Karmali on 'An Abundance of Birds'.

October 18th - 20th 1980 Camping field trip to 'Kentrout', Timau. Leader: Mrs Daphne Curtis. Mr and Mrs Strong, managers of 'Kentrout' are opening the grounds for a camping weekend for members at Shs 10/- per tent per night. Members should be self contained with all equipment. Some food, such as milk, fish, vegetables, eggs and lamb will be for sale - everything else will have to be brought. Kuni will be provided for a communal fire, but individual cooking stoves must be brought by members. Water will be available from the mountain stream. Drinking water should be brought. Timau is at an altitude of over 2,500 m (8,000 ft) so members should be prepared for cold nights. If you wish to take part in this field trip, please fill in the enclosed form and return it with a stamped addressed envelope to Mrs A.L. Campbell, P.O. Box 14469, Nairobi. Further details and directions will be sent to members after October 5th 1980. (A 6 bed flat is available. Will anyone interested in occupying this please write direct to Mrs Strong, P.O. Box 14, Timau, Kenya).

Monday 10th November 1980 at 5.30 p.m. in the Museum Hall, Nairobi. Dr Vernon Eagle will give an illustrated lecture on 'Spiders'.

November field trip to the Molloy at Limuru. Date to be announced later.

Sunday 23rd November 1980 Third annual Nairobi Bird Census. Full details later, but please make a note of this important date in your Diary.

Monday 8th December 1980 at 5.30 p.m. in the Museum Hall, Nairobi. Mr Lawrence Frank will give a lecture on Spotted Hyaena in the Mara Game Reserve.

Wednesday morning bird walks continue. Please meet at the National Museum, Nairobi at 08.45 a.m. Leader, Mrs Fleur Ng'weno.

*** IMPORTANT NOTICE

THE MT. SUSWA CAMP HAS HAD TO BE CANCELLED. FOR FULL DETAILS OF THE REASON, PLEASE SEE PAGE 86 OF THIS BULLETIN.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

Fr: Mildred Raitt - SI Libraries

H
135
I

1980

EANHS

BULLETIN

RECEIVED
JUN 22 1981
SIP DISTRIBUTION

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

EANHS BULLETIN NOVEMBER/DECEMBER 1980

CONTENTS

A Few Agama Lizard Observations 90
Probable Breeding of Trumpeter Hornbills in Tsavo East National Park 91
Demented Cuckoo Hater 91
Flowering Times of Flowering Trees 92
Land Use Practices Between Nairobi City and Emali 95
A New Fruit Bat from Shimba Hills 96
Cheetah Attacking Leopard; a Black Serval 97
Wounded Impala in Possession of Herd 97
Marabou Stork Killing Lesser Flamingo 97
A Sure Cure for Scorpion Bites 98
Unusual Cattle Grazing 99
Obituary - Leslie Hilton Brown O.B.E., D.Sc. 99
- Dr P.J. Greenway O.B.E., F.L.S. 1897-1980 . . . 100
Leslie Brown Trust Fund 102
Birds of East Africa 102
Book Review - Birds of Africa 103
- Sun, Sand and Snakes 104
- Classification of East African Crops 105
Stop Press Birds of East Africa 105
Natural History Weekend at Timau 105
For Sale 107
Tennant Wanted 107
Photographic Exhibition 107
Society Notes 108
New Members 109
Society Functions 110

A FEW AGAMA LIZARD OBSERVATIONS

In my garden at Likoni on the Kenya coast I have a large population of Agama Lizards, Agama sp, and have often wondered where they breed and what their eggs look like. I now know, for on 14th December 1979 a female Agama was observed emerging from a hole in the garden by my gardener who knows my interest in reptiles of every sort and drew my attention to the spot.

We dug down very carfully and came to a nest of eight eggs. These were about 12 to 15 cm underground close to the base of a plant which is often watered during this dry season, but the 'nest' was not shaded by the plant, probably because the heat from the sun is needed to incubate the eggs. The soil was closely packed around them and the eggs themselves were oval, about 20 mm long and 12 mm wide. The white leathery shell had a roung texture which under magnification showed a sort of crazy-paving pattern, but very, very fine.

In order that I should not miss the hatching, I removed one egg which I buried in a small pot of soil and kept in a heated cupboard in my room, wetting it periodically. Some 18 days later my curiosity got the better of me and I carefully dug out this egg to examine it and found that it had actually grown ! It was now 25 mm long and 20 mm wide and slightly discoloured. I feared it may be addled but replaced it carefully and continued to keep it damp.

On 9th February 1980 it happened ! There was a baby Agama sitting on top of the pot. It was about 45 mm long with a tail of 50 mm. I carried it out to my plant house where dozens of Agamas live and the little thing made a dash for a sunny spot where it lay blissfully soaking up the warm sunshine. When I went to the place where the rest of the eggs were sure enough there was a little hole. I dug down very carefully and found a very lively baby leaving in a hurry to find the sunshine above.

This seems to prove that the incubation period for Agama Lizard eggs is eight weeks.

I have found one other egg which we think must be that of a Plated Lizard, Gerrhosaurus major. It was much bigger, the length of a large chicken egg and just over 25 mm wide. The texture of the leathery white shell was very finely lined, finer than a finger-print; both ends were very finely dotted. Unfortunately, this egg was damaged when digging out an old compost pit and no other eggs could be found. It contained an embryo about 40 mm long with a tail as long again, and a large quantity of egg yolk on which the young lizard could feed. It was not possible to establish from this very young embryo that it definately was a Plated Lizard, but I have seen them in the vicinity so presume that my identification was correct.

I also have Monitor Lizards, Varanus niloticus, around the place, but their eggs must surely be a lot bigger right from the start. While on the subject of Monitors, they must have tremendously powerful jaws. I once watched one struggling to crack open a very large snail and the effort caused the creature to lift its whole body from the ground, but eventually it succeeded in breaking the very thick strong shell and eating the contents; - I wish we had more Monitors and less snails in the garden !

Juanita Carberry, P.O. Box 96094, MOMBASA, Kenya

PROBABLE BREEDING OF TRUMPETER HORNBILLS IN TSAVO WEST NATIONAL PARK

On 5th October 1980, we were travelling east along the new Mitio Andei River circuit raod about 5 km west of the Mtito Andei gate. A male Trumpeter Hornbill, Bycanister bucinator, flew across the road and landed in an Acacia (probably tortilis) tree by the river. We noticed that he was poking his bill into a hole in the tree. Closer inspection showed that the hole, between 2 and 3 metres from the ground, had mud in two places. The male was holding a fruit, some 2 cm in diameter, in his bill. After a minute or so, a second bird, which proved to be an adult female, struggled out of the hole and sat on a branch alongside the male. He continued to offer the fruit but she did not seem interested in it. About two minutes later the pair flew off together.

The record is of interest since the species does not occur in Tsavo East National Park (Lack et al, Journal of the East Africa Natural History Society and National Museum, 1980, 170: 17) although it was recorded some years ago at Bushwhackers (where it does not occur now) and the Kibwezi Forest (N. Skinner pers. comm.; Stott & Selsor, unpubl. MS). Further, there are no breeding records for the species in East Africa (Brown and Britton, "The Breeding Seasons of East African Birds" 1980). It is fairly clear, however, that the pair we observed were preparing to breed.

D.E. Pomeroy & B. Tengecho, Dept. of Zoology,
Kenyatta University College, P.O. Box 43844, NAIROBI

DEMENTED CUCKOO HATER

With reference to the letter in the Bulletin for July/August 1980, perhaps readers would like to be reminded of what Sir Frederick Jackson says about this same bird, the Red-chested Cuckoo, Cuculus solitarius. They will remember that he was our first Chairman of Committee in 1909 and afterwards became Governor of Uganda.

After describing the call of this bird he writes - "Generally speaking it is not unpleasant, but to those who live near a wood or forest it becames little less than maddening. At Entebbe in March, April and May, when it was very plentiful, its monotonous and almost incessant call, day and night, is so distracting as to prevent sleep. In 1914 it was so plentiful in the Chief Secretary's garden, and he and others living near spent so many sleepless nights, that I was petitioned to send my collectors down to reduce their numbers". (Birds of Kenya Colony and Uganda Protectorate, 1938, p. 4 7).

He says also (p. 486), "I believe that it is never silent during any part of the year, nor is its call an indication of the breeding season; and if, furthermore, it is not heard, it can be safely inferred that it is absent". In our minds and experience it is connected with rain, and it is curious that he does not mention this. Of course its breeding seasons are tied to those of its hosts. Jackson and Praed and Grant believed that it had extensive local movements, Bannerman (The Birds of West and Equatorial Africa, 1953, Vol. 1, p. 268) records that "in the centre of its range, in Equatorial Africa it is believed to be stationary". But no doubt it is still true that "We have still much to learn about its movements".

Miss P.M. Allen, P.O. Box 14166, NAIROBI

FLOWERING TIMES OF FLOWERING TREES

The preliminary observations on flowering times by P.W. Mumiukha in the last Bulletin was very interesting. I hope it will spur us all to further observations.

In Nairobi, I have for some time been trying to figure out the flowering seasons of trees with showy flowers, without much success. A larger and longer set of observations are needed.

Tentatively, I would say that most exotic trees seem to follow the southern hemisphere seasons in and around Nairobi. For instance, Jacaranda and Pear (Pyrus) trees flower in the southern hemisphere spring, September-October, each year. Those trees that in their native country blossom in the 'summer' tend to blossom from November to March around Nairobi.

Most indigenous trees, however, do not seem to follow this pattern. Some native trees respond to the rains. The common Croton, Croton megalocarpus, seems to flower at the onset of the rains in Nairobi. Others respond to some mysterious stimulus I have yet to understand. For instance, most of the Cape Chestnuts on the Escarpment wall on the old Nairobi-Nakuru road flower at the same time. Several times I have observed them in February-March. This agrees with the "Two main flowering seasons, February and August," listed in Kenya Trees and Shrubs by Dale and Greenway. This year, however, we found them in full bloom in late April. The Cape Chestnuts around Mweiga, near Nyeri, were in full flower in early December 1979.

In areas of Langata, in the drier south western part of Nairobi, the full blossoming of the Ochna bushes fills the landscape with colour and fragrance. Yet among them are individuals of the same species which remain covered in old leaves, unresponsive to the stimulus which triggered the others.

Some tree species seem to have some individuals in flower throughout the year in Nairobi. Cape Chestnuts, as previously noted, have flowering peaks in February and August. But I have seen Cape Chestnuts in flower somewhere in Nairobi every month of the year. I believe this is also true of Nandi Flames.

Some trees have such a brief flowering period that they may be missed altogether if you are not observing regularly. Craibia brownii is an inconspicuous dark-foliaged forest tree most of the year. When it flowers, the entire tree is covered with creamy-white or rosy pea flower blossoms, giving off an enchanting perfume. A few weeks later all the Craibia trees are dark and dull again. In 1979, Craibia trees flowered in Nairobi at Christmastime. When will they flower in 1980 ?

If indigenous trees do indeed respond to rain rather than the time of year, it would therefore follow that their flowering time would change according to whether it is a dry year or a wet one. Observations to determine flowering time would therefore need to be carried out over several years.

I suggest that members of the E.A. Natural History Society start such a study. Results would be published in the Society's Bulletin each year.

To keep the study as simple and widely used as possible, I suggest that we use only four showy indigenous flowering trees, plus the most spectacular exotics, as follows :

1 Nandi Flame, Spathodea nilotica, also called the African Tulip Tree. Easily recognised by its large compound leaves and large bright red flowers. A west Kenya tree now widely planted from the highlands to the coast.

2 Cape Chestnut, Calodendrum capense. The clusters of flowers are pink, mauve or lilac-blue, depending on one's sense of colour ! Rather large simple leaves and greyish trunk. A highland tree much planted in gardens.

3 Muringa, Cordia abyssinica. A spreading roadside tree with flat clusters of bright white flowers and round rough leaves. Scattered at middle altitudes.

4 Yellow-barked Acacia, Fever Thorn or Naivasha Thorn, Acacia xanthophloea. A large thorn-tree growing along lakes and streams in fairly dry country, also much planted along highways and in gardens. The flowers are in small groups, yellowish or pinkish white. The bark is yellow.

5 Baobab, Adansonia digitata. A lowland tree.

6 Jacaranda, Jacaranda mimosifolia. A spectacular exotic.

Each observer should make a chart for his or her garden or neighbourhood, similar to the charts made by Mr Cunningham van Someren of the National Museum Bird Room for his study of flowering times in relation to movements of birds. Please see the attached sample. "Nairobi" would be too large and varied an area for one list, but "Museum Hill" would be an area of suitable size. Other lists could be made for other areas visited frequently.

The observer could add other species of flowering trees in which he or she is interested to the list.

When the tree is in flower, the observer simply ticks the box for the appropriate fortnight. For a heavy flowering of many trees, write in several ticks. Differences in the flowering times of individual trees in one area should be noted.

These trees are all conspicuous enough to be seen from a moving car, so that observers can note on a seperate sheet a heavy flowering of trees in the areas they visit. For instance: Baobab. Bamburi, 14.4.80. Three trees.

A single tree in flower in an unfamiliar area is not worth recording, as individual trees vary so much. It is important to keep one list for each area studied regularly, and another list for scattered visits. Leave space for any special notes.

Let's get started !

Fleur Ng'weno, P.O. Box 42271, NAIROBI

SUGGESTED LIST OF FLOWERING TREES

Locality________ Observer________

	Jan	Feb	Mar	Apr	May	Jne	Jly	Aug	Sep	Oct	Nov	Dec	Notes
Nandi Flame													
Cape Chestnut													
Muringa													
Yellow barked Acacia													
Baobab													
Jacaranda													
Tree of your choice													

LAND USE PRACTICES BETWEEN NAIROBI CITY AND EMALI

The area between Nairobi, Konza and Kajiado township is part of the Athi - Kipiti Ecosystem or also commonly called the Athi - Kipiti plains. It is mainly covered by the black cotton soils which become waterlogged during the rains and crack when there is a drought. Past Konza, along the Nairobi - Mombasa road, the area becomes hillier and the soils change to mainly red sand loams. The topography, soils and of course rainfall (about 1500 mm) of the area influence the type of plant communities and plant species that grow in this zone.

On the Athi - Kipiti plains the vegetation is mainly grassland. Dominating this plant formation are *Themeda triandra*, *Setaria incrassata* and *Pennisetum mezianum*. Where the soils are stonier, there is normally a combination of *Themeda triandra* and *Pennisetum stramineum*. There are other grasses like *Cynodon dactylon*, star grass, needle grass *Aristida adscensionis*, sickle grass *Microchloa kunthii* and *Dinebra retroflexa*. *Aristida adscensionis* and *Dinebra retroflexa* are annual grasses. In low lying areas which experience flooding it is common to observe grasses such as *Ischaemum afrum*, *Setaria incrassata*, *Echinochloa haploclada* and water Guinea grass *Panicum subalbidum*. It is not a complete grassland; there are bushes and trees such as *Aspilia pluriseta*, the whistling thorn *Acacia drepanolobium*, and *A. stuhlmanii*. These are found particularly in low lying areas. On the higher ground where the soil is stony and not deep can be found *Balanites aegyptiaca*, known as the giraffe tree, *Acacia drepanolobium* and *Hibiscus flavifolius*. Along the river courses like the Stony Athi are Acacia woodlands with *Acacia kirkii* and *A. xanthophloea* or *A. seyal* sominating. It is the *Acacia seyal* woodland that dominates below Lukenya Hill. Occasionally we have *Ficus sycomorus* and *Acacia albida*.

In the hilly area of this zone, the vegetation is more woody and is described as wooded bushland. Although it is dominated by bushes, there is a sizeable number of tree species. The trees include *Acacia gerrardii* which is an indicator species for this zone, *Combretum molle*, *C. binderanum*, *Lannea* sp, *Dombeya rotundifolia* and *Acacia polyacantha*. On the bush list are *Acacia brevispica*, *A. nilotica*, *A. mellifera*, *Aspilia mossambicensis* and the straggling *Ipomoea spatulata*. Though not common and not in the bush layer, *Albizia amara* is another indicator species.

Grasses are many but the dominant ones are the *Panicum maximum*, a grass that grows to over 1.2 m high, and *Themeda triandra*. These two grasses are rated very highly as pasture grasses. Found very frequently are also grasses like the Maasai lovegrass, *Eragrostis superba*, wooly finger grass *Digitaria milanjiana* and the common African foxtail, *Cenchrus ciliaris*. Around Emali the grassland is dominated by dropseed, *Sporobolus pellucidus*, *Eragrostis caespitosa*, *Cymbopogon pospischilii*.

The Athi - Kipiti palins are famous for their large number of plains ungulates which they supported in the past. Not only wildlife used these plains but also the Maasai who kept large herds of cattle, sheep and goats. Before independance, the area was used for cattle ranching and the Nairobi National Park was established after the Second World War for conservation of wildlife that once abounded in there and as a tourist attraction right on the door step of Nairobi City.

In the hilly areas of the zone we had and still have cattle ranching as well as bee-keeping. It is in this zone that we have the leading meat processing plant, the Kenya Meat Commission at Athi River township. Also at Athi River is the East African Portland Cement Ltd; this factory is fed by limestone from Kibini near Sultan Hamud. Other human activities that went on or are common in this zone are sisal growing, poultry raising and irrigated agriculture to raise beans, all around Athi River township. The potential for this zone has not been exploited to its maximum.

P.W. Mumiukha, Egerton College, P.O. NJORO, Kenya

A NEW FRUIT BAT FROM SHIMBA HILLS

Today my attention was drawn to some copies of your EANHS Bulletin and I thought it might be useful to draw yours to the discovery, recently, of a new fruit bat species from the Shimba Hills (also known from the Usambara Mountains, Tanzania).

The species has been named Myonycteris relicta, is known from three specimens, is intermediate in size between M. torquata which occurs in Central (and Western) African forests and Lissonycteris angolensis, its other close relative. The latter species occurs in Kenya, is sometimes included in the genus Rousettus, and may be sympatric with the new species, as it is also known from south eastern Kenya. It is distinguished from both by the complete lack of a third lower molar. It shares with both a collar of aberrant, thick hairs on throat and neck sides in adult males. (Bergmans, W., 1980. A new fruit bat of the genus Myonycteris Matschie, 1899, from Eastern Kenya and Tanzania, (Mammalia:Megachiroptera). Zoologische Mededelingen 55 (4): 171-181. Published 4.111.1980).

Mr and Mrs N.W. Nicholson, writing on a twin in a Scotophilus species (the name nigrita is probably wrong; according to recent research this is the name of the very large species, called 'gigas' until now. The two smaller yellow-bellied species in Kenya are S. dinganii (Smith) - being the oldest name for what has long been called nigrita, and possibly S. viridis for the smaller species of the two) in EANHS Bulletin of May/June 1980, and asking if twins are common in this species: yes, twins do occur frequently in S. dinganii at least. From what I have seen of female bats with larger juveniles clinging to them I think that indeed they may at times be seriously hampered in their flight. Any bat may incidentally end up on the ground. Some may take flight from the ground (as Rousettus aegyptiacus), others crawl towards a higher obstacle which they will attempt to climb in order to launch themselves in the air again from some height above the ground.

W. Bergmans, Instituut voor Taxonomische Zoologie,
Zoologisch Museum, Universiteit van Amsterdam,
Plantage Kerklaan 36, 1018 CZ AMSTERDAM, Holland

CHEETAH ATTACKING LEOPARD; A BLACK SERVAL

On 2nd October 1980 in the Maasai Mara Game Reserve, an adult female Cheetah, Acinonyx jubatus, accompanied by an almost grown youngster was seen repeatedly attacking an adult male Leopard, Panthera pardus which had a freshly killed young Cokes Hartebeest, Alcelaphus buselaphus cokii. Both Cheetahs made short snarling rushes but backed off when the Leopard growled at them. Eventually the Leopard dragged the kill off into the bush and the Cheetahs gave up. As we did not see the start of the 'fracas', we were unable to ascertain whether the Leopard took the kill from the Cheetah in the first place - but it would seem possible.

On 26th September 1980 at 3,000 m on the Aberdares at noon, a Black (melanistic) Serval, Felis serval, was clearly witnessed crossing the road; in fact it stopped and stared at us for several minutes.

Peter Davey, P.O. Box 15007, NAIROBI

WOUNDED IMPALA IN POSSESSION OF HERD

Competitive interactions between territorial male impala, Aepyceros melampus, rarely lead to serious injury. However, in all horned ungulates, there are occasions when battles are so fierce than an animal is mortally wounded. On 31st August 1980, I visited Lake Nakuru National Park, Kenya, and, accompanied by eleven university students, witnessed an unusual sight.

An adult male Impala was observed near the vicinity of the falls. This male occupied a large herd of females. We moved closer to the herd and then noticed that the resident male's shoulder had been pierced by the horn of an opponent. Indeed, a portion of the horn (estimated 20 to 25 cm) remained lodged within the left side of its neck. Remarkably, there was no sign of blood or swelling, indicating that the wound had healed. The male was walking normally and seemed to be in full control of the female herd. Apparently, the resident male had won the encounter and somehow managed to survive this unusual injury.

Dr Terry L. Maple, Georgie Institute of Technology,
ATLANTA, Georgia 30332, U.S.A.

MARABOU STORK KILLS LESSER FLAMINGO

On 3rd October 1980 at 11 a.m. I was watching a fair sized group of Lesser Flamingo, Phoeniconaias minor, at the south end of Lake Nakuru. They were standing in a compact group in shallow water and were obviously restless. Nearby stood a single Marabou Stork, Leptoptilos crumeniferus. As he took to the air, so did the Flamingoes and for a moment he was lost to sight among them. When the air cleared he was standing where they had been and had grasped a Flamingo by the neck just below the head and marched the miserable bird to and fro for approximately 90 seconds. At the end of this period the flamingo's struggles were very weak and as it collapsed he shook it violently by the neck like a terrier three times. He then doused it twice in the water and started to eat it with, by this time, a Sacred Ibis, Threskiornis aethiopica, and several gulls in close attendance.

Dr Anna Merz, P.O. Box 24897, NAIROBI

A SURE CURE FOR SCORPION BITES

Believe me, it works ! This extraordinary method for curing scorpion bites was discovered by the soldiers fighting in the Lybian desert during the last war.

An African Inland Church missionary, Rev. Earl Anderson, told me about it a few years ago in Logologo, Marsabit District, Kenya.

Here is how it works :

1. Open the bonnet of a car or other petrol engine vehicle.
2. Take a lead off a plug.
3. The person bitten by the scorpion holds the lead with one hand, the other hand holding onto the body of the car.
4. The operator then turns the ignition key or presses the starter, just for a second - not long enough to start the engine - but long enough to give a small electric shock to the patient.
5. Repeat this eight to twelve times.
6. Usually by the sixth shock the pain has practically disappeared and the patient himself askes for a for a few more shocks to achieve a complete cure.
7. If the pain was to recur later, a few more shocks would deal with it.

If the patient is a child and is afraid, an adult can take hold of the lead with one hand and hold the child with the other, the child holding onto the body of the car: the shock is just as effective.

I have not been able to figure out the mechanism of the cure, but I can assure you that it works and I hope you would not hesitate to try it if you or your friends are victims of this very painful bite.

Note : The ends of plug leads in certain cars are encased in a rubber sheath which has to be removed before the patient takes hold of the lead.

And please note : This is NOT a cure for SNAKE bites.

Dr Anne Spoerry, P.O. Box 27, SUBUKIA, Kenya

UNUSUAL CATTLE GRAZING

During 'Operation Drake' Lake Turkana Periphery Biological Survey, travelling by boat, the M.V. "Halcyon" of the Kenya Fisheries Department, we landed at Sandy Bay North, 3° 02'N, 36° 24'E for a two night stay on 17th September 1980.

We were most surprised to find hundreds of head of Turkana cattle standing belly deep in the water. At first we thought they were just drinking; closer observation, however, showed that the cattle were in fact grazing on the submerged aquatic plant Potamogeton pectinatus L.

The animals would submerge their heads, often above eye and ear level, take a mouthful of the plant, lift the head out of the water, then masticate, then repeat the action.

The second day the cattle appeared around 8 a.m. from inland where there was simply no grazing whatsoever. They all entered the water, walked out twenty or thirty metres and commenced grazing and this they did throughout the day. Herdsmen entered the water repeatedly to keep their herds together and seperate from other herds.

Potamogeton pectinatus is a grass-like aquatic species with long narrow leaves which float at the water surface. We found that the broad bed of this plant extended along the shore line for a very considerable distance and cattle were everywhere grazing on it.

I can find no mention in the literature examined of this plant being grazed by cattle. Its introduction to dams in arid country might provide supplementary dry season grazing.

G.R. Cunningham van Someren, P.O. Box 40658, NAIROBI

(A note from the Herbarium : 'We have specimens of P. pectinatus from Ferguson's Gulf, E. Turkana, Tula Bar delta near Ileret and Alia Bay, E. Lake Rudolf, all described as common or abundant. We have in the Herbarium a specimen of this species collected by O.M. Mwangangi from south west Lake Turkana who records the Turkana name ESIDIKO and notes 'said to be grazed by cattle only''. Ed.)

OBITUARY - LESLIE HILTON BROWN O.B.E., D.Sc.

With the death of Leslie Brown in August 1980 at the age of 62, Africa lost one of its most well-known and talented ornithologists.

The first ornithological event in his long and distinguished career was at the age of five when he found a Linnet's nest in his native Scotland. His early schooling was in India, where he began schoolboy egg-collecting at the age of 11, and photography and more serious studies of birds at 16. He completed his formal academic training at St Andrew's University obtaining a B.Sc. in Zoology, followed by specialist courses in tropical agriculture at Cambridge and the Imperial College of Tropical Agriculture in Trinidad.

His work in the Colonial Agricultural Service began in Nigeria in 1940 and in 1946 he moved to Kenya which became his home. He was appointed Deputy Director of Agriculture in 1956, and as Chief Agriculturalist from 1960 to 1963 he was responsible for irrigation schemes and other major developments during the crucial period between colonial and independent rule. On retirement he was awarded an O.B.E. for his services to agriculture.

While working as an agriculturalist he began his legendary studies of the ecology and behavoiur of eagles and flamingoes, publishing various papers on these and other species, mainly in the Ibis and our journal. After retirement he was able to persue these long-term field studies with greater vigour, and he embarked on a fresh career as a writer and consultant ecologist (specializing on rangelands and the management of semi-arid areas). Of the numerous books and papers which he wrote, 'Africa: A Natural History', 'Eagles, Hawks and Falcons of the World', and 'British Birds of Prey' are especially noteworthy; he was working on the page proofs of the first volume of 'The Birds of Africa' the day he died, and 'The Breeding Seasons of East African Birds' appeared the same day. He was particularly proud of his D.Sc., given by St Andrew's University in recognition of his published work, and his various other honours included a medal of the British Ornithologist's Union in 1970 and his election as a Corresponding Member of the B.O.U. as recently as March 1980. Less than two weeks after his death he was to have been a Vice-Chairman of the Fifth Pan-African Ornithological Congress in Lilongwe, Malawi.

As President of the East Africa Natural History Society from 1961 to 1963, and later as Chairman of the Scientific and Technical Committee of the East African Wildlife Society, Leslie was able to communicate his ideas and enthusiasm to many. He travelled widely in Africa and elsewhere, though much of the year was spent working at Karen or relaxing at Watamu. He is arguably the most well-known writer on natural history subjects in East Africa, yet few members of this society know him as a friend. His reputation as a bad-tempered, prickly individualist was certainly justified - in fact he relished in the infamy of it - but he was a stimulating, helpful and understanding friend and colleague to those who knew him well.

The gap left by the early death of this immensely talented man will be difficult or impossible to fill. Our deepest sympathy is extended to his wife Barbara and his son Charles.

P.L.B.

OBITUARY DR P.J. GREENWAY, O.B.E., F.L.S. 1897-1980

Dr Greenway, who died in Nairobi during the eclipse of the sun on 16th February 1980 was the first permanent resident in East Africa to devote his life to the study of its plants. Peter Greenway (really Percy, but he hated that name) was a man who made his way to a position of high esteem, almost veneration, in botanical circles by the sterling qualities of his character and intellect in spite of difficult circumstances, He had to leave school at 13 and his first job as apprentice to a firm of nursery men in Essex meant washing flower pots in wintry weather for about 1/- a week.

Fortunately he was able to obtain horticultural training in the East Anglian Institute of Agriculture, later in the gardens of the Royal Horticultural Society at Wisley and lastly, after war service with mules in the Army Service Corps in France and Italy, at Kew. At each place his examination results were excellent, those at Kew really startling with 89-97% in 7 subjects with 75% in his worst subject, Geology. This led to his obtaining employment in the herbarium at Kew where he attracted the attention of Dr Joseph Burtt-Davy of the Imperial Institute at Oxford who was working on a flora of the Transvaal and who employed him as assistant in the herbarium at Oxford until in 1928 he became the first taxonomic botanist in British East Africa. He was on the staff of the Agricultural Institute at Amani in the Usambaras which had been started on the initiative of the great German biologist F. Stuhlmann in 1903.

With truly prodigious energy Greenway set himself to organising the herbarium, training a staff, setting up a plant identification service, studying the local uses of plants and making a series of botanical safaris to most parts of what is now Tanzania, Zambia, Malawi and Uganda. He wrote a series of papers on economically useful plants, some of which were inspired by the need for substitutes in the 1939-45 war. He also wrote several accounts of the vegetation of different parts of Tanzania, not all of which could be published. In 1949 he moved the herbarium to Nairobi. In 1952 he was doubly honoured, receiving the O.B.E. and a doctorate 'honoris causa' from Witwatersrand University. In 1958 he retired as Botanist in Charge of the herbarium but went on working largely on medicinal plants. In 1963 he returned to the herbarium as a part time staff member, finally retiring in 1974. During his latter years he made several vegetational surveys of national parks in Tanzania and Kenya. His extensive collections, which include the types of many new species, are well known among botanists for their excellent preservation, full notes and their numerous duplicates which are preserved in several countries.

Dr Greenway was a trustee of the Coryndon (later National) Museum in Nairobi from 1961 to 1975, Editor of the Journal of the East Africa Natural History Society and National Museum from 1960 to 1976 and an active member of the Kenya Horticultural Society.

The chief botanical works by which Dr Greenway will be remembered are 'A Swahili Botanical English Dictionary of Plant Names' (1937 & 1940), 'A Checklist of the Trees and Shrubs of Tanganyika Territory' (with J.P.M. Brenan, 1949), 'Kenya Trees and Shrubs' (with I.R. Dale, 1961) and 'A classification of the vegetation of East Africa' (1973). Two genera were named after him, Viridivia in the Passifloraceae and Greenwayodendron (Annonaceae) and more than a dozen species and varieties.

All those of us who had the good fortune to know Dr Greenway personally will remember him, apart from his botanical knowledge, for the meticulous rectitude with which he fulfilled and over-fulfilled his duty to the states which employed him and for his unfailing friendly helpfulness to colleagues, correspondents and visitors and to the staff who, in spite of the very restricted education which alone was available to Africans in those days, developed their sterling qualities under his care.

J.B.G.

LESLIE BROWN TRUST FUND

At the close of the 5th Pan-African Ornithological Congress held recently at Lilongwe in Malawi, it was unaminously agreed to set up a Leslie Brown Trust Fund for ornithological research in Africa.

But for his untimely death, Leslie would have been one of the Vice-Chairmen at Lilongwe and as such it is hoped that this fund will encourage and stimulate others to emulate Leslie's ideals and aspirations in the field of ornithological research.

Already a sizeable sum of money has been raised, but before such a fund can become operational, many more contributions are needed. All, no matter how small, or in what currency are warmly welcomed, and will be acknowledged. Please send your contributions to :

The Leslie Brown Trust Fund,
c/o P.O. Box 24916, Karen, Nairobi.

All cheques/drafts etc should be made payable to The Leslie Brown Trust Fund.

BIRDS OF EAST AFRICA

This long awaited book has finally been published, after many agonizing weeks and months of untold frustrations. The book was officially launched in Nairobi on 25th October, and is now available from most bookshops throughout the country, as well as direct from the Society's office and from the East African Wildlife Society shops.

Those persons who took advantage of the special pre-publication offer and who made arrangements to collect their copies direct from the Society's office may do so at their convenience.

For others who have not yet ordered a copy, the book may be purchased direct from the Society's office as well as from D.A. Turner, P.O. Box 48019, Nairobi. Costs are as follows :

Surface mail delivery within East Africa	Shs 130/-
Overseas surface mail delivery	£8.00 or US $ 17.50

Cheques and bank drafts should be made payable to :

BIRDS OF EAST AFRICA and not to the Society.

BOOK REVIEW

BIRDS OF AFRICA by John Karmali, a bird photographer in East Africa. Foreword by Roger Tory Peterson, published by Collins. 191 pages, 72 colour plates and over 140 black-and-white photographs.
Coffee Table Edition Shs 250/-; special price to EANHS members Shs 225/-.

- - - * - - -

John Karmali certainly needs no introduction to East African readers of this Bulletin, both as the active and respected Chairman of the East Africa Natural History Society, and as one of East Africa's most distinguished bird photographers, always going to great lengths to obtain the perfect photograph and not being happy until this is achieved. His extremely high standards of photography are clearly illustrated in this pictoral album of African birds, which are undoubtedly among the finest I have ever seen.

A total of seventy species representing some thirty five families are depicted in the book, and although some readers might have expected a wider range of species in a book of this title, with perhaps a selection of West and Southern African birds, the majority of birds in this book are fairly widespread throughout the African continent, and the overall richness of Africa's birdlife is clearly brought out in this beautifully produced book.

Although showing a marked bias towards East Africa and particularly Kenya birds (where indeed all the photographs were taken), the book opens with a short autobiography and an outline of the photographic techniques developed over the years by the author, and which have made him a true master of bird photography. This is followed by an excellent introduction on the zoogeographical distribution of birds, in particular the Palaearctic and Ethiopian regions with detailed information on the climate, vegetation and topography of this vast continent.

The author's thumb-nail sketches of the 35 families and 70 species make extremely interesting reading, and which include many valuable snippets of information not normally found in the more definitive textbooks and field guides. To conclude, the author gives quite comprehensive technical notes on each individual plate, which I'm sure will be of great interest to the many bird photographers who will no doubt strive to emulate John's tremendous photographic talents.

Coming at a time when there are a number of new bird books appearing on the local market, BIRDS OF AFRICA will, I'm sure, appeal to all persons with an interest in birds, whether it be from a professional or amateur viewpoint, and will undoubtedly prove a popular gift for the coming festive season, while in the long term I'm sure it will be one of Collins' more successful publications on African birds.

D.A.T.

(Members wishing to order this book at special discount should please fill in the enclosed form, copies will be autographed on the authors return from overseas leave. Ed.)

SUN, SAND AND SNAKES Stephen Spawls. Collins and Harvill Press, London 1979. Price £6.95

- - - * - - -

Stephen Spawls caught his first snake when he was 13 and since that time has become extremely knowledgeable on reptiles and is recognised as an authority on East African herpetology.

In his first book, SUN, SAND AND SNAKES, Steve, a fellow Society member, describes his early life in Kenya and then continues to write about the creatures and country he loves. The first four chapters I found a little slow with a fair amount of family detail, but from Chapter 5, 'They Bite and They Spit' the book increases in pace and interest. It is in this chapter that the author vividly describes his most serious encounter with a snake, resulting in him losing a finger.

Chapters 8,9 and 10 cover Cobras, Mambas and Pythons, giving facts about the snakes concerned and covering some most amusing, not to say hair-raising, stories about Steve's adventures while capturing these reptiles. I was particularly interested in his account of chasing Black Mambas in and out of beehives which always seem to be suspended high above hard and rocky ground !

'The Big River', Chapter 11, is the start of seven chapters describing safaris around Kenya in search of snakes. Many of the trips described are in North and North Eastern Kenya, areas of which Spawls is, not unnaturally, very fond. He writes with great feeling for the country, while his dry humour makes his tales of snake catching most entertaining.

In the final chapter 'The Creepers' Spawls gives an account of...."The zoologists call them specimens of Phylum Arthropoda, classes Arachnida and Chilopoda. A naturalist talks of solpugids, spiders, scorpions and centipedes. Anyone else says 'horrid creepy crawlies' ".

There is no index but a list of the common and scientific names of the creatures mentioned in the book and 17 colour plates, 16 of which are of snakes.

I read Steve Spawls SUN, SAND AND SNAKES with great enjoyment and not a few laughs; a completely non-scientific friend also read it and commented that he had learnt a good deal about snakes and had not realised that a 'dry' subject could be so very entertaining. Indeed, a book to be enjoyed by young and old, scientist or layman.

D.A.

(The review copy is now available in the Library. Of interest also maybe Spawls last scientific paper, "A Check List of the Snakes of Kenya", published in our Journal No 167. Price Shs 8/-. Ed.)

CLASSIFICATION OF EAST AFRICAN CROPS J.O. Kokwaro. Kenya Literature Bureau, Nairobi.
Price: Soft Cover only, KShs 47.00, US $ 8.65, UK£ 3.45

- - - * - - -

The work, by the Society's Vice Chairman, accurately records the scientific names, families and common names of some 587 species of commercial interest. These are arranged into two classifications by usage: cereals, oil and wax crops (19 groups) and those of commercial interest: cash crops, 'backyard' crops etc. (6 groups).

There is a series of 43 photographs illustrating a small selection of species listed. It will provide a very useful source of standard names of crops that will be of much use to workers writing accounts of East African crop plants. However, in the absence of any descriptions or keys, understandable in view of the number of species covered, or any guide to other relevant literature, it's use for the identification of East African crops is restricted.

M.G.

(The review copy of this book, presented by the author, is now available in the Library. Ed.)

STOP PRESS BIRDS OF EAST AFRICA

Pre-Publication orders of Birds of East Africa

Due to the lack of mailing wrappers for the book, we are at the moment unable to post any copies of BIRDS OF EAST AFRICA either locally or overseas. These wrappers are expected from the printers within a month.

Those persons who placed pre-publication orders may, however, collect their copies direct from the Society's office.

Any Inconvenience this may incur is very much regretted.

D.A. Turner

NATURAL HISTORY WEEKEND AT TIMAU

Timau is situated on the northern side of Mount Kenya at a little under 2,500 m.

Most Society members arrived on Saturday (18.10.80) lunchtime, and a good turnout ensured satisfactory recompense for Mr and Mrs Strong's hard work in preparing the site, in terms of trout consumed per capita at their excellent 'Kentrout Grill'.

On Saturday afternoon the first birdwalk was undertaken but this produced little apart from a European Hobby, Falco subbuteo. In the evening an excellent camp fire had been prepared to ward off the highland chill, while those who were prepared to risk losing their chops through an oversized grill had the use of a good cooking braai.

The main expedition of the trip was up the Sirimon Track, and this was planned for Sunday morning. A cavalcade of nine vehicles of assorted type and age set off at 9.30 a.m., and all arrived safely at the entrance to Mt. Kenya National Park, Much to the amazement of the askari at the gate. From there the track became steeper, and one by one the more venerable vehicles fell by the wayside. This may have proved to be a blessing in disguise for Mr and Mrs L.A.S. Grumbley who had an excellent sighting, in full song, of an Abyssinian Ground Thrush, _Turdus piaggiae_, while compulsorily parked in the forest zone.

A number of vehicles reached the parking space at 3,350m, on the track and from here stalwarts walked. Birds were scarce with the exception of the confiding Alpine (Hill) Chats, _Cercomela sordida_, a few pairs of Hunter's Cisticolas, _Cisticola hunteri_, and Yellow-crowned Canaries, _Serinus canicollis_ and one Malachite Sunbird, _Nectarinia famosa_. The weather was dull and cloudy and most members were satisfied with reaching the red and white pole marking the 4,000 m contour.

On the return trip down the mountain few mammals were encountered, though sightings of Giant Forest Hog, _Hylochoerus meinertzhageni_ were exciting, and a few shy Bushbuck, _Tragelaphus scriptus_, were seen. Mountain Greenbul, _Andropardus tephrolaemus_ were especially in evidence, with their contrasting grey heads and green backs, and in the fields near Kentrout a number of European Bee-eaters, _Merops apiaster_ were sporting, young birds with pale throats and no extended tail feathers.

There was good bird watching around the trout ponds, and the differences between Green and Wood Sandpipers, _Tringa ochropus_ and _T. glareola_ respectively, could be studied at close range. A number of African Snipe, _Gallinago nigripennis_ could be seen while other interesting birds seen included a young Rock Thrush, _Monticola saxitilis_.

On Monday most members departed, leaving only five tents to enjoy a final night. During the day the forest alongside the stream was thoroughly explored, and while birds were not overabundant, Chestnut throated and Grey Apalis, _Apalis porphyrolaema_ and _A. cinerea_ were seen and heard well and other worth while sightings included a small flock of Rufous-backed Mannikins, _Lonchura bicolor_ and a pair of Brown Woodland Warblers, _Phylloscopus umbrovirens_, calling to one another.

In the late afternoon the remaining members embarked on a final bird walk and enjoyed watching a pair of Black Cuckoo Shrikes, _Campephaga flava_, the male displaying fine yellow shoulders. The more sharp eyed watched three Alpine Swifts, _Apus melba_, swooping over on three or four occasions, very distinctive with their white bellies and long wings which seemed slim even for a swift. A productive walk was undertaken up one of the furrows and in the twilight we at last tracked down and had good views of the White-starred Forest Robin, _Pogonocichla stellata_, thanks to Yvonne Malcolm-Coe's excellent knowledge of bird songs.

Mr and Mrs Strong are now offering their camp site at Shs 10/- per head, and this site offers a restful weekend for anyone wishing to escape from the city.

Nigel Hartley

FOR SALE

1) Asahi Pentax Spotmatic camera with Super Takumar F1.4, 50 mm lens together with the following :
   Super Takumar F4, 200mm telephoto lens
   Doubler Auto teleplus 2X
   Pentax elns reversing ring and four filters, extension rings
   Microscope Adapter
   SHS 4,500/-
   Macro Takumar 1.4, 50 mm lens SHS 2,700/-
   Nikonos 111 Underwater camera with Nikkor 2.5, 35mm lens complete with instruction manual, spare sealing rings, grease etc.
   SHS 4,500/-

   Please contact Mr or Mrs Campbell, P.O. Box 14469, Nairobi, telephone 582284 (evenings).

2) An almost new Tamron 500 Mirror lens,
   SHS 3,900/-
   Please contact Mr M.J. Adams, telephone 23803

3) A mass of Hasselblad equipment, including 2 bodies, 4 magazines, 4 lenses etc. Many parts recently serviced by the factory in Sweden. Phone Norman Myers at 43677 or 43402 or write to P.O. Box 48197, Nairobi.

- - - * - - -

4) Surplus to requirement : Birds of the Western Palaearctic Volume 2, in pristine condition. Cost £30, will sell for SHS 500/-. Please contact D.E. Pomeroy, P.O. Box 43844, Nairobi

TENNANT WANTED

Tennant wanted, sympathetic to preservation of flora and fauna, for the two acre rock and trees Rima Island, Lake Naivasha. Equipt house with a rowing boat. KSHS 1,500 per month for twelve months. Please contact Victor Burke, c/o Roger Sylvester, P.O. Box 14040, Nairobi, telephone (office) 26069.

PHOTOGRAPHIC EXHIBITION

Mr P.J. Frere will be mounting an exhibition of enlarged photographs, mainly of birds, but with a few mammals and scenes, at the New Stanley Hotel, in the Link Corridor Gallery from December 1st to 7th 1980.

Some of these photographs have already been seen by those attending Fleur Ng'weno's bird walk in our Langata garden.

SOCIETY NOTES

1981 Membership Renewals

A renewal form is enclosed to all members other than Life Members and those who have already paid for next year. Although subscriptions are not due until 1st January 1981, it is always of great help to the Secretary if some are received before that date; the work load at the beginning of the year is then not so great. I would be most grateful if you would fill in the form and return it with payment to The Secretary, P.O. Box 44486, Nairobi.

Birds of Africa by John Karmali

To date the books have still not arrived in Kenya and Mr Karmali has now left Kenya on overseas leave. Those members ordering copies can have them signed by Mr Karmali in early January by leaving their books in the Society's office at the National Museum. For orders, please fill in the enclosed form and return it to the Secretary.

Functions

Three points to mention about Society functions:
a) Mrs Lise Campbell, our Functions Organizer, will be away on overseas leave from December until the end of May. Your help is needed in organizing trips, camps and lectures. Any member who has ideas of trips and is willing to run them is kindly asked to contact the Secretary. The same applies for lectures.
b) It has again come to the Executive Committee's attention that some members regularly refuse to enclose a stamped addressed envelope when returning their camp slips. In furure NO information will be sent to those who do not enclose a s.a.e.
c) Members are requested to note that if the functions organizer thinks that a camping trip will be over-subscribed, she has the right to decide that there will be NO GUESTS. After all, we all pay our subscriptions and trips are arranged to suit members, guests wishing to attend Society functions will have to join.

Warning to Members Camping at Samburu

Members be warned - Samburu is no longer a safe place to camp ! The Secretary, on a recent trip there, camped on the Ewaso Nyiro River, Camp No. 2 and had several items, sheets, blankets, torch etc, stolen. This is apparently a small loss; tourists camping in the same site recently had everything stolen from the camp, the thieves left just the tent ! It is thought that an askari can be hired from the National Reserve Headquarters near Samburu Lodge. Any member with more information on this is kindly asked to inform the Secretary, this will be passed on to members.

Birds of East Africa

Please see pages 102 and 105.

Aloes of Tropical Africa and Madagascar are now back in stock and available to Society members at a special discount price of Shs 240/-. Please place your orders as soon as possible as we only have 10 copies for sale.

Birds of the African Rain Forest

These two superb bird records are also back in stock and members can purchase copies at Shs 90/- for the set. Orders to the Secretary please.

Intertidal Seaweeds in Tanzania

This book, which also covers the Kenya sea shore is on sale to members at Shs 40/- from the Society's office.

NEW MEMBERS

Local Full Members

Mr and Mrs Peter Coote, c/o U.N.D.P., P.O. Box 30218, NAIROBI
Mr and Mrs L.A. Demmers, P.O. Box 47074, NAIROBI
Mr and Mrs Jurgen Doetinchem, P.O. Box 47996, NAIROBI
Ms Elizabeth A.M. Herbert, P.O. Box 30486, NAIROBI
Mr Leo G.A. Hoevers, Chemelil Sugar Co Ltd., P.O. Box 177, MUHORONI, Kenya
Mr P.J. Johnston, Nairobi School, P.O. Box 30047, NAIROBI
Mr Alan D. Jones, Kenton College, P.O. Box 30017, NAIROBI
Ms Irene Moser, P.O. Box 45694, NAIROBI
Mr Yoshihiro Otsu, P.O. Box 55691, NAIROBI
Mr David Overton, P.O. Box 60670, NAIROBI
Mrs Jennifer Parish, P.O. Box 40661, NAIROBI
Mr Jess Reed, c/o Game Ranching Ltd., P.O. Box 47272, NAIROBI
Mr and Mrs J.G. Roberts, P.O. Box 14417, NAIROBI
Mr and Mrs P.R. Simpson, P.O. Box 14322, NAIROBI
Mr and Mrs Vaulkhard, P.O. Box 30725, NAIROBI
Mr and Mrs Watson, P.O. Box 30707, NAIROBI
Mr John Worth, P.O. Box 50708, NAIROBI

Local Junior Members

Mr P.W. Kinyui, P.O. Box 30298, NAIROBI
Bagine R. Kiome, c/o UNESCO - IPAL Regional Office, P.O. Box 30592, NAIROBI
Beatrice Tengecho, c/o Chris Kimonge, Bank of India Ltd., P.O. Box 30246, NAIROBI

Overseas Full Member

Ms Louise M. Hammond, 414 Lee Street No. 7, Oakland, California 94610, U.S.A.

Change of Status to Life Membership

Dr A.H.B. Rydon, 3 Roeheath, North Chailey, Nr Lewes, East Sussex, BN8 4HR, England.

SOCIETY FUNCTIONS

Monday, 10th November 1980 at 5.30 p.m. in the Museum Hall, Nairobi. Dr Vernon Eagle will give an illustrated lecture on 'Spiders'.

Sunday 23rd November 1980 Third Annual Nairobi Bird Census. Those wishing to take part in this important Society event held in the greater Nairobi area should please fill in the enclosed form as soon as possible and post it to The Secretary, P.O. Box 44486, Nairobi, or drop it into the Society's office in the National Museum. For further information, please telephone Mrs Fleur Ng'weno, Nairobi 28166, or Dennie Angwin at the Museum (742131/2/3/4 ex. 18) or at lunch time at 60434.

Sunday, 30th November 1980 Field excursion to Ruiru Dam. Leaders : Mr and Mrs Gilpin. Please meet at the National Museum at 9.30 sharp and bring a picnic lunch if you wish to stay all day. This scenic area is very good for water birds and the flowering plants should be interesting after the rains.

5th and 6th December 1980 Society's trip to Ngulia Lodge to see bird ringing. Mr Graeme Backhurst and Dr David Pearson have kindly agreed to show MEMBERS how the birds are ringed at Ngulia Lodge on the above nights. The ringing will only take place if the weather is misty. Naturally, we cannot guarentee the weather, but the dates have been chosen for the best forseeable conditions. Accomodation is available at the Ngulia Bandas, 8 km from the Lodge, the four bandas there have been reserved for EANHS members who should go direct to the A.A. to pay for them, first come basis. Ngulia Lodge is offering 20% off their usual residents' rate, which works out at Shs 450/- per double per night full board; children 2 to 5 Shs 50/-, children 6 to 11 Shs 75/-. For bookings please contact Mrs Kariuki, African Tours and Hotels refering to the Society's block booking before 6th November, after which date the special price stops.

Monday 8th December 1980 at 5.30 p.m. in the Museum Hall, Nairobi. Dr Lawrence Frank will give an illustrated lecture on 'The Spotted Hyaena in the Mara Game Reserve'.

Monday, 12th January 1981 at 5.30 p.m. in the Museum Hall, Nairobi. Dr David Pearson will give an illustrated lecture on 'Bird Migration in Africa'.

16th/17th/18th January 1981 Week end camp near Kajiado. Leader, Dr J. Darlington. Please meet at Kajiado (on the Namanga road 50 km south of Athi River) at the ICIPE Field Station near the hospital at the south west end of the town, either on Friday 16th at 6 p.m. sharp, or at 10 a.m. sharp on Saturday 17th. Please bring all food, water and equipment.

Monday 9th February 1981 at 5.30 p.m. in the Museum Hall, Nairobi. Dr L. Hurxthal will give a talk on 'The Ostrich' and show a film (25 minutes) 'The Impossible Bird'.

Sunday, 22nd February 1981 Dudu Crawl led by Mike Clifton, full details later.

Monday, 9th March 1981 at 5.30 p.m. in the Museum Hall, Nairobi ANNUAL GENERAL MEETING, followed by a film show.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SI

EANHS

BULLETIN

RECEIVED
JUN 22 1981
SIP DISTRIBUTION

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

EANHS BULLETIN JANUARY/FEBRUARY 1981

CONTENTS

Report on the Third Annual Nairobi Bird Census. 2
Scavenging Pied Kingfishers 5
Some Dodoma Area Breeding Records - 1979 5
Parasitic Behaviour of the Red-chested Cuckoo 7
Eclipse Notes 7
Lodgers 8
Field Trip to Ruiru Dam 11

Book Reviews :

The Book of Kenya. 12
A Field Guide to the Mammals of Africa including Madagascar 13
A Field Guide to the Birds of East Africa 14
The International Trade in Rhinoceros Products 15
Freshwater Snails of Africa and their Medical Importance 16
Annual General Meeting. 17
Society Notes 17
For Sale. 18
New Members 18
Society Functions 20

- - - - - * - - - - -

REPORT ON THE THIRD ANNUAL NAIROBI BIRD CENSUS

The third census of birds held within the Nairobi Provincial boundary took place on Sunday 23rd November 1980. The weather was dull and cloudy early in the morning, becoming hot and sunny later.

This census unfortunately received less publicity in the popular press and as a result the number of participants was reduced. The following figures show clearly how very important it is to have a large number of participants :

	1980	1979	1978
Number of participants	75	108	62
Number of parties	56	72	40
Number of species	285	304	265
Number of individual birds	13,431	14,964	9,917
Number of hours in the field	189	305	245
Species with only one record	75	83	90

We would like to thank all those who gave their time to the census and we hope that members can be persuaded to take part in this important Society event in 1981. A complete list of participants, areas covered, numbers and species follows.

PARTICIPANTS IN THE 1980 NAIROBI BIRD CENSUS

A.D. Lewis, M. Guppy, J. Halliday, R. Izagiriza, Ray Moore, Phil Lewis, Michael Bamford, Peter McCosh, Dennie Angwin, Mike Marsh, Peter le Pelley, Yvonne Malcolm-Coe, E.H. Risley, J. Eliot, Mr and Mrs G.R. Cunningham van Someren, Ian van Someren, Roy Gregory, June Dirks, Mr and Mrs Visagie, Mrs V.K. Loefler, Dr I.J.P. Loefler, Fleur Ng'weno, Mr and Mrs Wootton, Mr and Mrs Price, Peter Osborn, P.J.S. Hewett, Mike and Caroline Gilbert, C. Briffett, Fiona Alexander, Mrs F.M. Edwards, Lady Cole, Mrs E.B. Angwin, Katherine Lock, B.M., R.F., V.K. and G.A. Sturrock, Mike Clifton, Eleanor Thomson, P.R. Simpson, B.M. Williams, Mrs J.D.M. Silvester, J. Grieves-Cook, S. Boulton, D. Brass, Lise Campbell, Mrs Denise Duncan, Jamie and Dindy Drury, Mr and Mrs Dempster, P.M. Allen, Daphne and Fritjoff Lagerberg, I. Ayres, Jessica Wootton, Sarah Craddock, Daphne Curtis, Joan Goodhart, Lucy Ndegwa, G.L. and S.J. Machamer, Lionel and Jean Hartley, Rosemary Barasa, D. Pomeroy, B. Tengecho, David Pearson, B.S. Meadows, D.F. Kent.

AREAS COVERED IN THE 1980 NAIROBI BIRD CENSUS

Nairobi National Park, Animal Orphanage, Karen, Ngong Race Course, Rowallan Scout Camp, Langata, Westlands, Loresho, Spring Valley, Kitisuru, National Museum, City Centre, Upper Hill, Golf Range, Nairobi Dam, Belle Vue, Lavington, Karura Forest, Kenyatta University College, Kiambu Road, Peter Greensmith's Nursery, Arboretum, City Park, Closeburn Estate, Chiromo, Embakasi Ranching Company, Dandora Estate, Salopia Farm, Kariobangi Sewage Farm, Dandora Sewage Oxidation Ponds and the Kenya Institute of Administration Kabete.

SPECIES AND NUMBERS RECORDED DURING THE 1980 CENSUS

Nomenclature follows Mackworth-Praed and Grant, and not the order in which the census form is printed. Forms will follow the Mackworth-Praed order from the 1981 census. Figures underlined (e.g. 100) following the species name are for 1980. the first figure in parentheses are 1979 numbers and the second figure represents the 1978 recorded number. If one of these birds was not recorded in 1979 or 1978 a dash (-) is shown for that year. Birds not previously recorded during the census are shown in capital letters.

Ostrich 90 (140,8); Little Grebe 312 (27,18); WHITE-BREASTED CORMORANT 1; Long-tailed Cormorant 31 (10,2); Darter 3 (2,-) Pink-backed Pelican 5 (9,-); Grey Heron 10 (18,4); Black-headed Heron 26 (102,28); Purple Heron 2 (3,2); Great White Egret 6 (8,-); Yellow-billed Egret 5 (25,11); Cattle Egret 363 (312,17); Green-backed Heron 1 (-,3); NIGHT HERON 3; Hammerkop 13 (18,13); Marabou Stork 107 (499,27); Yellow-billed Stork 17 (43,-); Sacred Ibis 172 (228,64); Hadada Ibis 154 (82,92); GLOSSY IBIS 4; AFRICAN SPOONBILL 2; Maccoa Duck 3 (-,2); White-backed Duck 5 (-,10); African Pochard 185 (113,-); Shoveler 30 (34,-); Yellow-billed Duck 26 (44,-); Garganey 700 (71,5); Hottentot Teal 3 (15,-); Red-billed Duck 181 (136,64); Pintail 20 (60,-); White-faced Tree Duck 33 (156,-); Knob-billed Goose 4 (5,1); Egyptian Goose 17 (21,9); Spur-wing Goose 3 (1,1); Secretary Bird 7 (14,4); Ruppell's Griffon Vulture 37 (21,3); White-backed Vulture 179 (160,10); Lappet-faced Vulture 1 (2,-); Egyptian Vulture 2 (3,2); Peregrine Falcon 2 (3,1); EUROPEAN HOBBY 2; European Kestrel 2 (6,-); Kite 170 (310,188); Black-shouldered Kite 6 (22,32); IMPERIAL EAGLE 1; Steppe Eagle 3 (5,-); Tawny Eagle 5 (11,4); SPOTTED EAGLE 1; Crowned Eagle 4 (2,-); Long-crested Eagle 10 (15,6); Bateleur 6 (4,7); Fish Eagle 1 (2,1); Steppe Buzzard 2 (9,8); Augur Buzzard 38 (56,26); African Goshawk 3 (1,5); Gabar Goshawk 1 (2,1); MONTAGUE'S HARRIER 6; Pallid Harrier 7 (6,-); Harrier Hawk 1 (1,1); Yellow-necked Spurfowl 18 (42,9); Helmeted Guinea Fowl 88 (40,81); CORN CRAKE 1; Black Crake 10 (18,7); African Moorhen 8 (18,5); Red-knobbed Coot 807 (37,1); Crowned Crane 21 (15,15); Black-bellied Bustard 4 (-,3); Spotted Thicknee 4 (-,1); Jacana 3 (7,3); LITTLE RINGED PLOVER 1; Kittlitz's Sand Plover 4 (5,1); Three-banded Plover 2 (4,2); Crowned Plover 28 (59,50); Black-winged Plover 13 (2,3); Blacksmith Plover 19 (31,10); Black-winged Stilt 10 (21,-); Little Stint 41 (128,375); Ruff 60 (52,11); Common Sandpiper 7 (6,11); Wood Sandpiper 21 (36,22); Marsh Sandpiper 4 (1,1); Greenshank 9 (14,2); CURLEW 1 ; WHITE-WINGED BLACK TERN 1; Whiskered Tern 5 (10,-); Pink-breasted Dove 8 (11,27); Red-eyed Dove 161 (215,150); Ring-necked Dove 39 (114,29); Laughing Dove 82 (195,40); NAMAQUA DOVE 2; Tambourine Dove 2 (1,1); Emerald-spotted Wood Dove 3 (10,5); Lemon Dove 2 (-,1); Green Pigeon 8 (31,22); African Cuckoo 2 (-,1); Red-chested Cuckoo 15 (18,8); Emerald Cuckoo 1 (14,4); Didric Cuckoo 19 (16,5); Klaas' Cuckoo 18 (18,9); White-browed Coucal 12 (4,8); Hartlaub's Turaco 13 (13,21); Lilac-breasted Roller 2 (2,1); Giant Kingfisher 1 (3,2); Malachite Kingfisher 6 (4,1); BROWN-HOODED KINGFISHER 1; GREY-HEADED KINGFISHER 2; Striped Kingfisher 4 (1,3); European Bee-eater 58 (68,29); Little Bee-eater 17 (14,12); Cinnamon-chested Bee-eater 98

(129,100); Silvery-cheeked Hornbill 2 (18.1); Grey Hornbill 1 (4,-); VON DER DECKEN'S HORNBILL 1; Hoopoe 16 (15,19); Green Wood Hoopoe 2 (-,6); Scimitar-bill 1 (3,-); Abyssinian Scimitar bill 1 (-,1); Barn Owl 1 (4,-); African Wood Owl 3 (4,3); SPOTTED EAGLE OWL 1; Abyssinian Nightjar 9 (13,2); Speckled Mousebird 588 (592,385); Blue-naped Mousebird 16 (10,35); Narina's Trogon 2 (11,10); White-headed Barbet 17 (19,15); Spotted-flanked Barbet 2 (5,-); Red-fronted Barbet 2 (1,-); Golden-rumped Tinker Bird 31 (61,8); d'Arnaud's Barbet 1 (2,-); Greater Honeyguide 2 (1,2); Lesser Honeyguide 3 (2,2); Eastern Honeybird 3 (4,1); Nubian Woodpecker 3 (7,2); Cardinal Woodpecker 6 (6,7); Brown-backed Woodpecker 4 (1,2); BEARDED WOODPECKER 1; Grey Woodpecker 8 (6,3); European Swift 5 (20,-); Nyanza Swift 2 (13,4); Little Swift 466 (214,246); White-rumped Swift 41 (26,19); Palm Swift 1 (1,4)

Rufous-naped Lark 73 (51,44); Fischer's Sparrow Lark 8 (11,100); Athi Short-toed Lark 5 (50,3); Red-capped Lark 7 (36,-); White Wagtail 6 (5,2); African Pied Wagtail 78 (34,29); Yellow Wagtail 397 (408,382); Richard's Pipit 21 (23,17); Tree Pipit 3 (7,13); Red-throated Pipit 9 (14,13); Yellow-throated Longclaw 23 (26,20); Northern Pied Babbler 26 (29,54); Yellow-vented Bulbul 354 (396,242); Placid Greenbul 21 (20,38); Yellow-bellied Greenbul 15 (5,4); Slender-billed Greenbul 11 (8,10); Yellow-whiskered Greenbul 36 (41,41); Spotted Flycatcher 6 (8,2); Dusky Flycatcher 38 (42,28); Pale Flycatcher 21 (16,6); Grey Flycatcher 8 (2,-); White-eyed Slaty Flycatcher 114 (150,95); South African Black Flycatcher 2 (2,-); Yellow Flycatcher Warbler 5 (3,2); Chin-spot Flycatcher 41 (52,44); Paradise Flycatcher 43 (57,38); Olive Thrush 129 (159,120); Rock Thrush 2 (1,2); Wheatear 16 (31,38); Pied Wheatear 7 (10,24); CAPPED WHEATEAR 1; Anteater Chat 2 (-,5); Stonechat 2 (8,5); Ruppell's Robin Chat 47 (78,41); Robin Chat 63 (43,47); Red-backed Scrub Robin 2 (3,4); White-starred Bush Robin 1 (4,8); SPROSSER 2; Whitethroat 3 (2,-); Garden Warbler 12 (1,1); Blackcap 30 (12,12); MARSH WARBLER 1; SEDGE WARBLER 1; Lesser Swamp Warbler 4 (3,3); Willow Warbler 39 (15,11); Fan-tailed Warbler 5 (1,-); Grey Apalis 11 (4,9); Black-headed Apalis 2 (4,1); Black-collared Apalis 6 (9,9); Yellow-breasted Apalis 75 (46,37); Grey-capped Warbler 18 (15,12); Red-faced Crombec 7 (6,4); Yellow-bellied Eremomela 6 (11,1); Grey-backed Cameroptera 57 (39,44); Pectoral-patch Cisticola 34 (26,10); Rattling Cisticola 18 (18,10); Singing Cisticola 116 (87,69); Red-faced Cisticola 3 (6,5); Winding Cisticola 79 (28,52); Stout Cisticola 17 (10,10); Tawny-flanked Prinea 29 (38,57); Moustache Warbler 2 (1,4); European Swallow 118 (637,73); Wire-tailed Swallow 10 (12,1); Red-rumped Swallow 23 (29,34); Striped Swallow 67 (127,21); African Sand Martin 10 (62,16); Banded Martin 2 (1,-); African Rock Martin 14 (26,47); Black Roughwing Swallow 86 (61,125); Black Cuckoo Shrike 16 (7,7); Grey Cuckoo Shrike 5 (4,3); Drongo 7 (7,3); Brubru Shrike 8 (9,4); Fiscal Shrike 129 (237,243); Long-tailed Fiscal 38 (38,20); Red-tailed/Red-backed Shrike 5 (-,3); Slate-coloured Boubou 2 (5,2); Tropical Boubou 82 (100,57); Black-backed Puff-back Shrike 41 (44,42); Brown-headed Tchagra 1 (3,1); Sulphur-breasted Bush Shrike 8 (10,7); White-bellied Tit 57 (68,56); Red-throated Tit 3 (1,-); European Golden Oriole 1 (-,1); Black-headed Oriole 24 (35,17); Pied Crow 158 (274,80); Blue-eared Glossy Starling 16 (2,70); Red-wing Starling 7 (21,-);

Hildebrant's Starling 23 (21,-); Superb Starling 85 (162,78); Yellow-billed Oxpecker 7 (3,3); Red-billed Oxpecker 24 (19,3); Common White-eye 81 (114,211); Kikuyu White-eye 82 (73,46); MALACHITE SUNBIRD 2; Bronze Sunbird 221 (237,170); Beautiful Sunbird 2 (18,2); Mariqua Sunbird 5 (7,-); Variable Sunbird 224 (282,180); Eastern Double-collared Sunbird 13 (11,15); Northern Double-collared Sunbird 1 (4,-); Amethyst Sunbird 52 (64,39); Scarlet-chested Sunbird 27 (46,30); Green-headed Sunbird 1 (4,2); Collared Sunbird 73 (59,67); White-browed Sparrow Weaver 14 (25,1); Grey-headed Social Weaver 8 (2,30); Kenya Rufous Sparrow 169 (182,204); Parrot-billed/Grey-headed Sparrow 71 (110,43); Yellow-spotted Petronia 11 (2,-); SPECKLE-FRONTED WEAVER 5; Layard's Black-headed Weaver 130 (289,221); Speke's Weaver 322 (359,70); Masked Weaver 6 (3,32); Reichenow's Weaver 272 (392,322); CHESTNUT WEAVER 1; Spectacled Weaver 21 (21,35); Holub's Golden Weaver 73 (70,62); Brown-capped Weaver 5 (-,3); Grosbeak Weaver 35 (116,51); Red-billed Quelea 177 (17,85); Yellow Bishop 3 (8,5); White-winged Widow Bird 34 (75,20); Red-naped/Red-collared Widow Bird 93 (38,227); Jackson's Widow Bird 93 (137,163); Bronze Mannikin 575 (653,629); Rufous-backed Mannikin 18 (27,34); SILVER-BILL 1; Quail Finch 3 (1,-); African/Red-billed Fire Finch 169 (242,182); Yellow-bellied Waxbill 26 (18,2); Common Waxbill 191 (325,177); Crimson-rumped Waxbill 232 (46,113); Red-cheeked Cordon Bleu 55 (56,25); Common Indigo Bird 28 (45,18); Pin-tailed Whydah 51 (70,49); Yellow-fronted Canary 9 (2,1); Brimstone Canary 11 (15,1); Yellow-rumped Seed Eater 68 (29,45); Streaky Seed Eater 249 (361,333); African Citril 59 (56,85); Golden-breasted Bunting 19 (19,21); Cinnamon-breasted Rock Bunting 4 (6,3).

Dennie Angwin

SCAVENGING PIED KINGFISHERS

On 25th April 1980 I was driving along the Great North Road near Sao Hill, Tanzania, when I saw two Pied Kingfishers, *Ceryle rubis*, fly off the road in front of the car. When I reached the spot where they had been I found a dead Civet Cat, *Viverra civetta*, that had been killed by a car. The carcase was in an advanced state of decomposition and crawling with maggots. I assume that the Kingfishers had been feeding on the maggots when I disturbed them.

I have never heard of Kingfishers behaving like this. Has anybody else ?

David Moyer, P.O. Box 77, MBALA, Zambia.

SOME DODOMA AREA BREEDING RECORDS - 1979

1. The Apparent Breeding of White Pelicans, *Pelicanus onocrotalus*, at Bahi Swamp, Central Tanzania.

On 24th May 1979, while flying over Bahi Swamp, I noticed a large number of White Pelicans packed together on small bare islands approximately 200 m from the shoreline, in the southern part of the lake. Again on 4th June the pelicans were very noticeable, even from 2000 ft. The level of the water was very high owing to the good rains that year.

On 24th June I attempted to travel overland but was unable to reach the swamp because of the extremely waterlogged tracks. A week later I tried again by a different route and this time succeeded in getting to the swamp shoreline which was quite firm in most places. The water level had receded considerably and I was unable to recognise the pelican islands I had previously seen, apart from one which was just still an island although very close to the recent shoreline. On the island were about 100 White Pelicans, mostly in immature plumage, which swam away as I approached. I searched the island, which was 100 m x 30 m , and found several old eggs and a lot of rubbish, sticks, old feathers etc which must have been the remains of nests but as they were so indistinct it was impossible to count the number of nests the island must have held.

Discussion:

1. The eggs were sent to G.R. Cunningham van Someren at the National Museum, Nairobi, and were identified as White Pelican.

2. This site and other possible ones seen from the air are very close to several Wagogo villages, e.g. Kapanga and Chole. These villagers are pastoral and graze their cattle along the shoreline and out into the swamp, so there must have been continual disturbance to any nesting colony of pelicans.

3. Leslie Brown in his 'Mystery of the Flamingoes', in his chapter on White Pelicans breeding on Lake Elmenteita, stresses that they desert easily and he himself went to great lengths to prevent this happening there.

4. It is very unlikely that flamingoes bred on the islands to give the pelicans confidence, although there are always several thousands of Lesser and Greater Flamingoes present at Bahi or nearby Ilinde.

5. It is possible that Grey-headed Gulls bred on the same islands as I found one egg which was identified as a probable Grey-headed Gull egg by G.R. Cunningham van Someren.

- - * - -

2. Whiskered Terns, *Chlidonias hybridus*.

During April 1979 Whiskered Terns in full breeding plumage were present on all water areas in the Dodoma area. I have no proof of breeding but the following notes were made during that time :

8th April : Msembeta Mbuga   Many Whiskered Terns in full breeding plumage, one bird seen picking up dead weed or grass and flying with it into the centre of the Mbuga.

18th April : Dodoma Town Swamp   Several Whiskered Terns in breeding dress observed catching food (small fish, I think), in open patches of water, on several occasions the food was not eaten but taken into the middle of the swamp amongst the reeds.

21st May : Dodoma Town Swamp   Pair with one young, begging for food, and which was very reluctant to fly.

1st June : Bahi Swamp, Dodoma About 100 Whiskered Terns on "Pelican Island", over half in juvenile plumage, some begging observed and one appeared to have only recently been fledged, as it could hardly fly and its parents stayed anxiously nearby.

D.K. Richards, P.O. Box 30750, NAIROBI

PARASITIC BEHAVIOUR OF THE RED-CHESTED CUCKOO

The description by Mr Fuggle, which appeared in the September/October 1980 Bulletin, p. 82, of the behaviour of an immature Red-chested Cuckoo, *Cuculus solitarius*, while waiting to be fed by its foster-parent, could equally be applied to what I observed some six months ago in my garden at Fort Smith, Nairobi, though in my case the 'parent' was an even more diminutive one - a Robin Chat, *Cossypha caffra*.

I watched feeding taking place on at least five days between 30th April and 17th May 1980. The high-pitched sound uttered by the young cuckoo struck me as being like that made by the fairly rapid stroking of the teeth of a fine, stiff comb.

The Robin Chat was kept very busy gathering food for its foster-chick, but only when it flew to a distant area to search, or perhaps take a rest, did the chick move to another perch nearer to its parent. Whenever the Robin Chat approached the waiting Cuckoo it had to take its perch at a higher level in order to be able to disgorge into the young bird's gape, owing to the very much greater size of the latter - almost double that of the parent.

W.P. Beattie, P.O. Box 29046, NAIROBI

ECLIPSE NOTES

The following are the only two notes received from members about their observations during the 1980 Eclipse.

"I was with a party of friends observing the 1980 Eclipse from a point along the Voi River. During the Eclipse we did not notice any reaction from the birds that were around. Song continued, and two circling vultures were observed at much the same height before and after the eclipse."

R.G. Timmis, P.O. Box 272, THIKA

"Prior to the start of the Eclipse, sunlight filtering through foliage formed small circles of light on the ground, but as the Eclipse progressed this 'pinhole' effect produced crescents which became even more slender until maximum coverage of the sun was reached (not complete where I was at the time, in Kabete, away from the path of totality), after which they increased, though now at a different angle, until full discs of light returned."

W.P. Beattie, P.O. Box 29146, NAIROBI

LODGERS

When I first moved into my flat in Nairobi some 20 years ago, I found lodgers already in residence. They were Little Swifts, Apus affinis, and were living on the varandah of this first-floor bed-sitter flat. I entertained them for quite a few years, but they proved to be noisy and messy tenants and not very good parents. Eggs fell out of the nest, naked, newly-hatched chicks fell out, and even parents fell from time to time. When this occurred I would have to retrieve the crouching bird from the floor and throw it out over the varandah where it could take wing and fly back to the nest.

However, on one memorable occasion things did not work out as usual. The bird insisted on entering the room instead of flying up to its nest. It was during the evening and no doubt the bird was dazzled by the lights in the flat. Time and again I flung the bird out over the varandah, but it returned and entered the flat. I hastened to close the doors and windows, but it flew back in again and then entered the kitchen. A friend was with me during that evening and we had been in the kitchen preparing our supper - Toad-in-the-Hole (sausages in batter). Not content with disrupting these domestic activities, the wretched bird then plunged into the batter ! We fished it out, wiped the batter off, and then prepared for the final fling. We hid the batter, turned off all the lights, closed the doors and windows and stationed ourselves on the varandah. I flung the bird out once more and, thankfully, it took to the wing and then flew straight back into the nest with much shrill trilling. We rushed back into the flat and, still keeping the doors and windows closed, finally sat down to our Toad-in-the-Hole, but it could have very nearly been 'Bird in the Batter' !

In time the building of extensions commenced and I could foresee a slum tenement so, regretfully, I decided the tenants must go. The demolition squad moved in and the nests were taken down. I had made sure there was no actual breeding going on at the time.

More prospective lodgers appeared during the Long Rains of 1977. The varandah is my garden and abounds with potted plants. In one long flower box I had raised a honeysuckle bush. Activity commenced in this shrub by a pair of Streaky Seed-eaters, Serinus striolatus, and one day I found a neat, small nest. Eventually three eggs were laid. The parent birds did not seem to mind cleaning or any other activity which went on around their quarters. The eggs hatched out and, in time, three healthy chicks jostled for the best position in their tiny nest. When fledging time drew near mishaps occured. The chicks fell out of the nest and flapped about on the floor. I prepared a shoe-box nest, but they hopped out of that. I then prepared a basket, lined it with soft material and a complete nest of feathers found in the garden. The parent birds accepted this new accommodation and, in a short while, the fledlings successfully took to the outside world. This event took a whole day, the adults hovering patiently on the varandah and coaxing the young away, one by one. Two observations made during this breeding were the delightful, soft 'nest song' by the parent birds, and the chewing of dying honeysuckle blossoms in between feeding the young birds.

Eight weeks later breeding commenced again. At the appropriate time I duly prepared the basket, but then discovered the nest had another tier built onto it. Wise birds. So all went well and, again, three well-fed youngsters departed successfully from their lodgings to the outside world.

No more breeding took place until the short rains of 1979. Again, three eggs were laid and all went smoothly and the young departed on time and in a healthy condition. However, during this breeding I observed that the parents were not so fastidious in their nest-cleaning operations, and the little home was becoming bespattered with droppings and also looked somewhat bedraggled. The honeysuckle bush was also past its best and becoming root-bound, so I removed both the nest and bush from the box.

1980 proved to be a very busy year. New lodgers arrived in January and insisted on moving inside the flat. I had noticed telltale signs around the flat - small droppings and bits of dirt and dead leaves. I soon found out who they were, and where they were setting up home. They were the Red-billed Firefinch, _Logonosticta senegala_, and they were building on a shelf over the varandah doors. I wondered what I was in for, but allowed building to proceed. I could actually lie in bed and watch all this interesting activity going on above me. It was a joint effort by both birds, but with the male being the more industrious builder. It took about eight days, with all sorts of material going up aloft, and then for two days dozens of feathers being brought in for the lining of the nest.

Noting the absence of the female I then poked an exploratory finger into the nest and out she popped. On poking deeper I felt three eggs. During brooding of the eggs the relieving bird would appear with a feather (sometimes three times the length of itself !), and chirp outside the nest. The sitting bird would emerge and fly away and the relieving bird enter, pulling the feather in behind it. The front door, perhaps. The eggs hatched and feeding duly commenced. Close encounters occurred from time to time, when I would obligingly retreat to a less intimidating distance - somewhat difficult in my small flat. All went well, and the faint cheeps became stronger day by day. One day feathers began to fly (out of the nest), and the male bird would rush around picking then up and shaking them and look quite puzzled. When I discovered the adults did not brood the chicks, I collected the feathers each evening and deposited them in and around the nest, from where three bright little gapes gleamed out at me from the depths of their downy domain.

Early one morning there was much activity aloft, with one chick fluttering out of the nest and floundering around on the floor, and the other two jumping about in the nest. As the adults had not yet appeared, I popped the chick back into the nest and told it to wait for its parents. It popped out again. On putting it back in again I became aware of things crawling up my arm. I found it was covered with minute, ginger-coloured ants. No wonder the poor little chicks were agitated and in a hurry to leave. Fortunately, the parents appeared and during the next few hours the fledglings left the nest and, finally, flew away into the garden. I hastily pulled down the nest. What a collection of rubbish, but how exquisitely lined and cosy it was inside.

What next ? A pair of Striped Swallows, Hirundo abyssinica appeared during the Long Rains in April and alternately flew round the varandah or perched on a wire and sang their out-of-tune but delightful little song. Several days were spent doing this, and then the earth-moving works commenced. My house-servant and I looked at the mess of the floor, but I assured him that once the "nyumba" was built there would be no more "chafu". In due course, the neat mud nest was completed, but I could make no close observations of subsequent events. Towards the end of May, healthy-sounding cheeps and twitters were heard, and I looked forward to seeing the young emerge. However, in June the noises ceased, although the parents still came to the nest. Early one morning, on awakening, I heard a thud on the varandah. I found one small corpse. In the evening I observed an ominous-looking bundle protruding from the tunnel of the nest. I intended to investigate the following morning but, on awakening, heard a thud, and then another one. Two little corpses lay on the varandah floor. So tragedy had struck my lodgers, but they did not seem to be unduly perturbed and continued to visit the nest and to sing away. I presumed the birds were probably first-time parents and the chicks died of starvation. The Swallows eventually vacated the nest and left the area.

That same month (June) the Finches returned and investigated their old lodging area. Of course they had to rebuild. On this occasion the female took no part and just perched on the furniture and looked on. The male appeared loth to collect material from outside and, instead, looked round the flat for suitable building materials. Then the attacks commenced - on the mats and on pieces of clothing which happened to be lying on a chair. I chided the bird and told him to go off outside for his material. He obligingly did so, but was back again in minutes and the attacks recommenced. All the while the female just sat - looking very rotund. I feared for my flat and, when a take-over bid appeared imminent, and the maternal event even more so, I decided to take a hand. I cut up two handfuls of various pieces of soft material and placed this on the varandah table. Within minutes all this material was deposited on the shelf. Then, thankfully, the feather-lining stage commenced, and I knew my flat was safe. The event had, indeed, been imminent as the eggs were laid immediately the nest was completed. Five eggs were counted on this occasion.

This breeding proved to be a little inconvenient, for when the eggs hatched and feeding began I had, of necessity, to leave the doors and windows open. It was now July and very chilly, and I therefore had to nobly endure the cold until feeding ceased for the day and I could close the doors and windows. I did not witness the departure of the fledglings on this occasion but presumed all had gone well. As there had been no invading ants I left the nest intact.

During the Short Rains in November the Striped Swallows' nest was taken over by the White-rumped Swifts, Apus caffer. I removed the nest very hurriedly, but observed the construction and lining carefully - truely a work of art.

The Finches came back the same month and were agreeably surprised, no doubt, to find their quarters intact. The female sat around and placidly surveyed the scene, while the male entered the nest and twitched a few feathers into place and brought in a few more. No hard work to be undertaken, and no fears from my side ! In due course in went the female, and later five eggs were discovered. She had not appeared nearly so rotund this time, and I had reckoned of three eggs being laid. After eventual hatching and despatching I checked the nest, and found two unhatched eggs. I removed and inspected them. They appeared old and discoloured, so I can only assume they were left over from the June/July breeding. The quarters are still intact and awaiting further occupation. Yes, 1980 was, indeed, a busy year for lodgers.

At the time of writing the Striped Swallows have returned and are perched on the varandah chortling away happily. Prelude to more earth works ? If so, better luck for 1981 !

Advertisment : Free board and lodging. Limited amount of household material supplied. Children welcome but, PLEASE, no "demented Red-chested Cuckoos" ! (See July/August 1980 Bulletin)

Yvonne Malcolm-Coe, P.O. Box 48504, NAIROBI

FIELD TRIP TO RUIRU DAM

With its grassy banks and peaceful views, Ruiru Dam was the scene of the EANHS field trip on 30th November 1980. Thirteen car loads of birdwatchers and botanists, families with young children, newcomers and oldtimers admired and enjoyed the lovely setting. The caretaker there identified some trees and relieved us of any anxiety about our cars. At short notice, Brain Meadows kindly led a morning birdwalk. In the bush at the edge of a field overlooking the stream his party spotted a Blackcap while a Grey-capped Warbler could be heard singing.

Eric Lucas, who had just arrived from England the day before and retired from the birdwalk prematurely, was rewarded with the sight of a Malachite Kingfisher feeding its young on a fish from the lake. At the dam observers saw Rock Martins perched on the retaining wall and a Common Sandpiper on the spillway. Thick-billed Seed-eaters fed on and below a tree on the embankment, while a Black Duck swam on the stream below. Locally common, a pair of Rufous-backed Mannikins were busy building a nest in an evergreen tree.

During lunch an Osprey dove twice for a fish, once missing and once flapping near the surface trying to sink in its claws. An African Darter perched silhouetted on a dead tree on the other side of the lake. Malachite Kingfishers flashed up and down the lake. After lunch families boated, fished and followed their own interests.

Visitors to Ruiru Dam need written permission. Apply to the Chief Engineer, Water and Sewage Department, Nairobi City Council, P.O. Box 30656, Nairobi. About two weeks is required for an answer. A license is required for fishing.

To get to Ruiru Dam from Nairobi, follow the Kiambu Road right through Kiambu Town. Turn right on the tarmac road to Githunguri. Go through Githunguri and turn right at a blue sign to Ruiru Dam just after a big church. This murram road, which can be slippery when wet, goes down to the dam. Distance from Nairobi is 44 km, time about an hour.

Susan Gilpin, P.O. Box 30577, NAIROBI

BOOK REVIEWS

THE BOOK OF KENYA by Eric Robins, with photography by Gerald Cubitt. Published by Collins, 1980. Price £15.

It has been a long time, if ever, that a book has been produced covering such an incredibly wide range of subjects, places, topography, peoples, and just plain 'happenings', on this magnificent country of ours, Kenya.

I am not an author, only a writer of occasional articles (all very small) but I am an avid reader, particularly of books that cover subjects on which I already have some prior knowledge.

It always gives me the greatest pleasure to read such a book, cover to cover, and to find that it is almost impossible to fault. I am, however, a photographer, with some knowledge of the technical methods and vast experience it takes to produce such superb work, as has been done by Gerald Cubitt. Even without the equally superb text, eminently readable, by Eric Robins, the photographs alone make it a very well worth while addition to any library - even if it is just left on the coffee table !

There are, of course, some minor errors, and I think it is only fair to point these out to readers, as some are important enough to cause confusion :

The new name for Thomson's Falls is a tongue twister for most of us who were not born here, and Mr Robins (or the Publisher) have left off the last bit. This makes it easier to say but is incorrect - NYAHURUHURU, not NYAHURU (page 29).

The White Rhino in Meru was introduced many years ago, as long ago as 1966, if not before, I believe, but it is only in recent years that these great beasts have suffered from the depredations of poachers (page 70).

On page 99, Mr Robins describes scenes in the great Northern Frontier that makes all those who have ever been there just itch to stop writing rubbish, drop everything, and return - - BUT the only SEMITIC driver I have ever seen there was an old friend from Texas, U.S.A., who'se parents had emigrated from Poland in the late 1800's, and wanted to drive my Landrover !

Poaching apart, there are still some Rhino left in Tsavo National Park, and it is sad that they were excluded from the 'Big Five' listed on page 140.

I have found one glaring error in the photographs - not a photographic error, but one of identification - the birds feeding on the Buffalo carcase (page 153) are WHITE-BACKED VULTURES not Ruppell's Griffon.

All this is minor stuff, the book as a whole is a work of art, and the above criticisms are intended to show that I have honestly read it, cover to cover, and intend to do so again, and again . . .

Peter Davey

A FIELD GUIDE TO THE MAMMALS OF AFRICA INCLUDING MADAGASCAR
Theodor Haltenorth and Helmut Diller. Translated by Robert W. Hyman. Collins, London 1980. 400 pages, colour illustrations and distribution maps. Index to common and scientific names. U.K. £ 8.95 Originally published in German in 1977.

This book is really something more than just a field guide for it packs a wealth of information compared to other Field Guides. Print is small but easy to read. That it is right up-to-date is indicated by the map of Africa which shows the State of Zimbabwe. The introduction is unusual, being a geological and climatological history of Africa and Madagascar commencing with the prehistoric fauna of 60 million years ago up to the present time.

The text deals with 13 Orders, 38 Families and 324 species out of some 1570 species present in Africa; it omits all the small rodents, shrews and bats. For each species there is a description with measurements, weights, distribution, habitat, activity, locomotion, toilet, voice, sense organs, enemies, food, social life, breeding, growth, longevity and in many cases the present status. The number of sub-species accepted is given but few are discussed or their distribution given. There are 245 small scale distribution maps. Also unusual, the introduced species are depicted and discussed such as the Coypu or Nutria, Myocastor coypus in Lake Naivasha.

As far as East Africa is concerned, I found only one omission in distribution, that of the Otter Shrew, Potamogale velox which has now been found in the Kakamega area. I was surprised to see the distribution of the Grey-cheeked

Mangabey, Cercocebus albigena, given as Kisumu, west Kenya. The map does not show this and the Mangabey is not recorded from this area. Strangely, the White-nosed or Red-tailed Monkey, Cercopithecus nictitans, is now shown for north western Kenya; it is common in the Kakamega area.

The 350 colour illustrations by Hermut Diller are good though in some cases, such as the gazelles, plates 17 and 18, look wishy-washy but this may be in colour seperation and printing. The animals generally look alive and the postures are good. Only one illustration worries me, the 'pink' Spotted Hyaena, plate 38. When judging colours it is to be remembered that we do not know which race Diller was painting. See the Giant Elephant Shrew, plate 59 (7) - our local coastal animal has a golden-yellow rump, hence Rhynchocyon chrysopygus whereas R. petersi is rufous and black, more like the plate. These two shrews are regarded by the authors as races of R. cirnei, and the distribution is not clear in the text. The Golden-rumped Elephant Shrew is only found north of Mombasa and Peter's south of that island. We regard them as full species. There are a number of instances where the authors are at variance with other mammalogists on the question of systematics and taxonomy. However, few folk are interested in systematics or taxonomy so where Haltenorth differs say from Meester and Setzer matters little.

New visitors to Kenya might find some plates a little confusing when attempting to identify local species, such as the Duikers, plates 5 and 6 and the gazelles, plates 17 and 18 with so many very similar species shown. For those interested in animals it is an excellent reference.

G.R. Cunningham van Someren

A FIELD GUIDE TO THE BIRDS OF EAST AFRICA by John G. Williams and illustrations by Norman Arlott. Collins, London, 1980. U.K. £7.95

This new volume brings together the data from Williams' original books 'A Field Guide to the Birds of East and Central Africa' 1963 and 'A Field Guide to the National Parks of East Africa' 1967. The 48 colour plates by Norman Arlott are bound together in the middle of the book and short descriptions are placed opposite the plate. Arrows showing diagnostic features have, unfortunately, been omitted. Over 665 species are described and illustrated while an additional 633 species are noted in the text.

I find little changed or new in the text to be worth mention. It will be the colour plates that will sell the book and these are an improvement on the authors originals but I still prefer those by Rena Fennessy and her black and white illustrations. Arlott's plates appear too gaudy and the colours of many birds is quite incorrect. However, this may be due in part to colour seperation faults. In many cases the shape and stance of the bird is quite incorrect and often the feet look too thick and heavy. Plate 15, the Turacos is not good while on plate 16, the Trogon's colour is quite terrible. Plate 18, the Bee-eaters, the colour is fair but the shape is wrong while the Pitta on plate 23 is altogether too gaudy and the stance and shape are incorrect. Plate 25, the Swallows, are far too strongly coloured. The Greenbuls on plate 26 appear messy and this is a group of birds that are far from easy to identify in the field. Plate 28, the White-starred Forest Robin is terrible, similarly the Silverbird and Paradise Flycatcher on plate 29. Plate 34 is messy and the White-eyes on number 37 are poor. The Weavers on plate 41-42 are coloured too gaudly and dramatic and the shape of the Crows on 48 is incorrect.

Many species are not illustrated and few females or sub-adults are shown. This is a common fault in most illustrated volumes, but then females are often ignored by bird-watchers and tickers. Newcomers to bird watching in East Africa are really going to be confused with scientific names; one is given in this new book, another in '*Birds of East Africa*' published by the Society and sometimes a third in Mackworth-Praed and Grant. In view of the number of new books, and we hear two others may soon be out, I turned to Williams' choice of nomenclature and find many instances where he uses scientific names which are not in keeping. A few examples suffice. *Anthreptes tephrolaemus*, the Grey-chinned Sunbird, is treated as a species and not a race of *rectirostris*, the Green Sunbird. Williams makes full species in many cases where these are generally regarded as races. He reverts to many old disused names, the Grey-headed Silverbill as *Odontospiza* caniceps not *Lonchura griseicapilla*, *Nycticorax* not the generic *Gorsachus* reverts to *Ardeola ibis* not *Bubulcus*. There are many others but he does up-date and use *Vanellus* for the large plovers. *Columba malherbii* is omitted.

G.R. Cunningham van Someren

THE INTERNATIONAL TRADE IN RHINOCEROS PRODUCTS

A report for the World Wildlife Fund (WWF) and International Union for the Conservation of Nature (IUCN).
By Esmond Bradley Martin. 1979. 82pp. Price $ 7.50

To those of us who are interested in the future of Rhinos, not only 'ours' but the vulnerable five species in the world, this monograph is an essential addition to our bookshelves.

However, due to the very nature of the report, it does not make pleasant reading as the following few quotes show :

"Today's world rhino populations are probably 10 per cent of what they were in the middle of the nineteenth century. The decline has been especially severe since 1970; it is believed that there were twice as many as there are now".

"During the past decade Kenya appears to have provided slightly over one-half of the world's rhino horn".

"According to official North Yemen statistics from 1969 to 1977, 22,645 kilos of rhino horn were imported. In other words, an annual average of 2831 kilos of rhino horn came into the country, representing for this eight-year period the death of approximately 8000 rhinos, which is almost the same figure as the one based on the total legal exports from East Africa at this time".

"Although North Yemen is the country which imports the greatest amount of rhino horn, the making of rhino horn handles for daggers is secondary to the use of rhino horn in traditional Chinese medicine. However, it is not in demand in Southeast Asia as an aphrodisiac".

The quotes could go on and on, but I would urge members to purchase themselves a copy of this work. Dr Martin is to be congratulated for producing this most informative booklet which is available from the IUCN and WWF.

Dennie Angwin

FRESHWATER SNAILS OF AFRICA AND THEIR MEDICAL IMPORTANCE

By Dr David S. Brown. 1980, British Museum (Natural History), London. Taylor and Francis. 487 pages, many photographs and line drawings, distribution maps.
Price U.K. £ 25

This book is so fascinating that I spent most of a Sunday with my nose buried in it. For anybody with any interest in freshwater snails the book is a 'must' - medical practitioners, veterinary biologists, limnologists or conchologists. The first half of the book is devoted to the systematics of the 400 species found in Africa (some 62 in Kenya). Most shells are illustrated by clear photographs or excellent line drawings. The key requires a little concentration to work (but I'm rusty) so the illustrations help. Under each species is a brief description, measurements and a section on habitat, distribution and parasitology, the latter concerning the ability of the species to act as the intermediate host of the schistosome in the miracidial stage.

The second half of the book is concerned with snails and schistosomes, or other snail-borne diseases. There are chapters on the biology of Bulinus, the most important group of snails, snail control and local faunas, chemical and physical factors determining distribution of species, reproduction and growth, populations and production, regional faunas and biogeography and an appendix of methods.

Until Dr Brown's book becomes available in Nairobi members wishing to see my copy are welcome to come to the Birdroom at the Museum.

G.R. Cunninghan van Someren

(The above review of our Life Members book is very short - it is the Society's policy not to give comprehensive reviews to books which have not been presented to the Society by the author or publisher. All the above books, with the exception of 'Snails' can now be seen in the Library. Ed.)

ANNUAL GENERAL MEETING

The 71st Annual General Meeting of the East Africa Natural History Society will be held in Nairobi on Monday, 9th March 1981 at 5.30 p.m. in the Museum Hall.

Nominations for Office Bearers and members of the Executive Committee as well as notices of matters to be included on the agenda should be sent to :
The Secretary, East Africa Natural History Society,
P.O. Box 44486, NAIROBI
to reach her no later than Monday 16th February 1981.

SOCIETY NOTES

1981 Subscription Renewals Our thanks to those who have paid their 1981 subscriptions so promptly. A renewal form is enclosed for those whose subscription is in arrears; this is the last Bulletin that will be sent to members who have not paid their dues.

'Birds of Africa' by our Chairman Mr John Karmali. Autographed copies are available from the Society's office in the National Museum at a special members discount price of Shs 225/-. Those who collected their copies before Mr Karmali signed them are requested to leave their books in the office for autograph.

'Birds of East Africa' Peter Britton (Editor) and the Society's Ornithological Sub-Committee. Copies can be purchased from the office or from Mr D.A. Turner, P.O. Box 48019, NAIROBI. Price Shs 130/-. Cheques should be made payable to BIRDS OF EAST AFRICA and not to the Society.

'Breeding Seasons of East African Birds' by Leslie Brown and Peter Britton. Copies are still available from the office - members price Shs 80/-.

'The Aloes of Tropical Africa and Madagascar' by G.W. Reynolds. More copies of this excellent book are in stock, price to members - Shs 240/-.

'A Field Guide to the Birds of East Africa' by John Williams, reviewed on page 14 of this Bulletin and

'A Field Guide to the Mammals of Africa including Madagascar' by Theodor Haltenorth and Helmut Diller, reviewed on page 13 of this issue. It is hoped that the Society will be able to obtain copies of these two books for resale to members. However, it is still uncertain whether the books will be available in Nairobi. Please place your orders with the Secretary, P.O. Box 44486, Nairobi as soon as possible.

Functions With our Functions Organiser, Lise Campbell, out of the country for several months, members are urged to help the harassed Secretary's by suggesting day trips, camps and lectures. Please contact either Dennie or Eileen Angwin, telephone 742131/2/3/4 (office) or 60434 in the evenings.

Photoletter Offer to Members These very attractive letters are being offered to members at Shs 1/20 each; one of each design is enclosed with this Bulletin. Profits from sales will go to the Society. An order form is enclosed, please complete and return to the Secretary, P.O. Box 44486, Nairobi as soon as possible.

Apologies to members for the very late appearance of this Bulletin. Due to the very heavy pressure of work at the beginning of the year, and the bird census analysis, things get delayed. Any members willing to help with the duplicating and collation of the Bulletin is kindly asked to contact the Secretary. We print 1,250 copies; to print, collate, staple and wrap them is a very long and tiring job.

FOR SALE

1) The following items are for sale, the property of the late Leslie Brown :

- a) A substantial amount of fishing tackle - both for fly, spinning and some deep sea stuff - all in very good condition.
- b) Two enlargers (Dark room) plus a lot of miscellaneous dark room equipment.
- c) Tripods, tripod heads, clamps etc.
- d) Phillips Cassette Tape recorder (battery), brand new.

Please contact Peter and Grete Davey, P.O. Box 15007, NAIROBI Telephone 891290, physical address, Simba Hill, Langata.

2) Two open reel Uher tape recorders in full working condition. Also an 18 inch reflector and a Grampian mike. Please contact Mr Graeme Low, P.O. Box 14825, NAIROBI, telephone 65482.

3) Out-of-print and rare books on Kenya, East, North-East and Central Africa. Please write to or telephone : Mrs A. Abell, P.O. Box 25277, NAIROBI, Tel: 566662.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Mr and Mrs C.F. Allen, P.O. Box 47074, NAIROBI
Mr and Mrs D.B. Allen, c/o K.T.T.C., P.O. Box 44600, NAIROBI
Mr W. Auters, c/o Belgian Embassy, P.O. Box 30461, NAIROBI
Mr Neil Baker, P.O. Box 1599, DAR ES SALAAM, Tanzania
Mr Leon Bennon, P.O. Box 21149, NAIROBI
Mr and Mrs Herbert G. Blank, P.O. Box 30261, NAIROBI
Mr L. Bonner, c/o Action Aid, P.O. Box 42814, NAIROBI
Dr Carla Boyce, P.O. Box 30137, NAIROBI
Mr Harry Briggs, c/o Kenyatta University College, P.O. Box 43844, NAIROBI
Mr and Mrs G.W. Brown, P.O. Box 42493, NAIROBI
Mrs K.G. Challis, P.O. Box 24815, NAIROBI
Dr N.M. Collins, P.O. Box 139, KAJIADO, Kenya
Ms Valerie Crawford, P.O. Box 49582, NAIROBI
Mrs I.M. Dueck, c/o K.T.T.C., P.O. Box 44600, NAIROBI
Dr and Mrs Don W. Fawcett, c/o ILRAD, P.O. Box 30709, NAIROBI
Mrs Susan Garau, P.O. Box 30030, NAIROBI
Mr Noel William Gerrard, P.O. Box 10, LIMURU Kenya
Mrs J. Greenlees, P.O. Box 30156, NAIROBI

Mr Lynwood M. Hume, P.O. Box 526, MACHAKOS, Kenya
Dr T.J. Johnson, Sulmac Co Ltd., P.O. Box 314, NAIVASHA, Kenya
Miss B. Kendall, P.O. Box 17032, VIPINGO, Via Mombasa
Mr M.J. Legg, P.O. Box 47920, NAIROBI
Mr Chris J. Mann, P.O. Box 47089, NAIROBI
Mrs V.G. Matthews, c/o Kenya Commercial Bank, P.O. Box 30081, NAIROBI
Ms Fleur Melesi, P.O. Box 84002, MOMBASA, Kenya
Mr Peter Osborn, P.O. Box 44286, NAIROBI
Mrs J.M. Pardo, P.O. Box 47402, NAIROBI
Mrs M. Piper, P.O. Box 24946, NAIROBI
Mr Donald Reilly, P.O. Box 30261, NAIROBI
Mr and Mrs Jack Robertson, P.O. Box 30061, NAIROBI
Mr Paul Bernard Rossiter, c/o K.A.R.I., V.R.D., Muguga, P.O. Box 32, KIKUYU, Kenya
Mr Marcus Rutherford, P.O. Box 90154, MOMBASA, Kenya
Mr and Mrs Settle, Thika High School, Private Bag, P.O. THIKA, Kenya
Mr and Mrs Larry Siemens, University College of Eastern Africa, P.O. Box 2500, ELDORET, Kenya
Mrs M. Sinclair, P.O. Box 30158, NAIROBI
Mr Paul Sullivan, Friends World College, P.O. Box 526, MACHAKOS, Kenya
Mr Barry Taylor, P.O. Box 87336, MOMBASA, Kenya
Dr Philip S. Thomas, P.O. Box 30577, NAIROBI
Ms Chieko Umetsu, Kiriani High School, P.O. Box 69, CHOGORIA, Via Meru, Kenya
Ms Pauline J. Wyllie, P.O. Box 45992, NAIROBI

Local and Overseas Junior Members

Iona Andrews, Kidbrooke Hostel, Michael Hall, Forest Row, Sussex RH18 5JB, U.K.
Charles Bore, Nairobi School, Marsabit House, P.O. Box 30047, NAIROBI
Macdonald G. Githinji, P.O. Box 72214, NAIROBI
E.J.N. Kimani, Nairobi School, Marsabit House, P.O. Box 30047, NAIROBI
J.E. Maina, Nairobi School, Athi House, P.O. Box 30047, NAIROBI
G. Martin, c/o Nairobi School, P.O. Box 30047, NAIROBI
Paul Martin, c/o Nairobi School, P.O. Box 30047, NAIROBI
J.A. Oluoch, Kenyatta University College, Aberdare Hostel, P.O. Box 30553, NAIROBI
A.Y. Suleiman, Nairobi School, Athi House, P.O. Box 30047, NAIROBI

Overseas Full Members

Jonny Hagberg, Moranvagen 26, S-13651, HANDEN, Sweden
Philip Jensen, Studentergarden, Tagensvej 15, 2200 KOBENHAVN N, Denmark
Dr and Mrs F. Victor, 9639 Chadwick, Leawood, KANSAS 66206, U.S.A.

Overseas Life Member

Mr W.M. Makins, Pensthorpe Hall, Fakenham, Norfolk, U.K.

Local Life Member

Andrew Wemyss, c/o Sotik Tea Co., Monieri Estate, P.O. SOTIK, Kenya

Change of Status to Life Membership

James Bartram, P.O. Box 40550, NAIROBI
John Collins, Castle View, Holy Island, Northumberland, U.K.
Mr S. Rabb, P.O. Box 46477, NAIROBI

SOCIETY FUNCTIONS

Monday 9th February 1981 at 5.30 p.m. in the Museum Hall, Nairobi Dr L. Hurxthal will give a talk on 'The Ostrich' and show a film (25 minutes) on 'The Impossible Bird'.

Sunday 22nd February 1981 Another popular 'Dudu-Crawl' led by Mike Clifton in the Nairobi area. Please meet at the National Museum at 9.30 a.m. and bring a picnic lunch if you wish to stay all day.

Monday 9th March 1981 at 5.30 p.m. in the Museum Hall, Nairobi 71st ANNUAL GENERAL MEETING, followed by a film.

Friday 17th to Monday 20th April 1981 Easter Weekend camp between Timau and Isiolo by kind invitation of Mr and Mrs Dyer. Full details later.

Lake Baringo Lodge offer to members of the EANHS and Kenya Museum Society. We have been offered the lodge at KShs 180/- per person full board. Groups of ten or more will be given a rate of Shs 160/- per person full board. Children sharing parent's room half price and under 4 years free. Mr Terry Stevenson, the resident ornithologist will lead, free, an escorted bird walk. Please book direct with Miss S. Mohammed, Manager, Central Reservations Office, Black Hotels, Standard Street, P.O. Box 47557, NAIROBI, telephone 22869. Your 1981 membership card must be shown when making the booking.

Hunter's Lodge Offer The manager of the lodge has offered the following attractive rates to members :

Friday dinner until Sunday lunch inclusiveL
Shs 250/- per person.
Children: 0 - 2 Free; 2 - 6 Shs 90/-; 6 - 12 Shs 120/-
(sharing a room with two adults)

Saturday dinner to Sunday lunch inclusive :
Shs 150/- per person
Children: 0 - 2 Free; 2 - 6 Shs 60/-; 6 - 12 Shs 80/-
(sharing room with two adults)

Book direct through Hunters Lodge Office, Solar House, P.O. Box 67868, Nairobi or telephone 20768 or Hunter's Lodge, P.O. Box 77 MAKINDU, Radio 2021. Your 1981 membership card must be shown when making a booking.

Wednesday morning bird walks continue. Please meet Fleur Ng'weno outside the National Museum at 8.45 a.m.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
S7
NH

EANHS

BULLETIN

RECEIVED
JUN 17 1981
SIP DISTRIBUTION

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings

EANHS BULLETIN MARCH/APRIL 1981

CONTENTS

Annual Report of the East Africa Natural History Society for 1979 22
Sharing One's House with Genets 23
Dry Season Troubles 26
Thirsty Bees 27
More Thirsty Bees 28
A Note on Stink Ants 28
Water Lilies as a Source of Food 29
Use of Water Lily Seeds 29
Rhino Status 30
Composition of Kenya's Avifauna 30
Extra-Ordinary General Meeting 32
Members Advertisments 32
Check-list of the Birds of Kenya 32
Society Notes 33
New Members 34
Society Functions 36

ANNUAL REPORT OF THE EAST AFRICA NATURAL HISTORY SOCIETY FOR 1979

1979 marked the 70th Anniversary of the foundation of the Society and many congratulatory letters were received from eminent persons and distinguished institutional bodies from all over the world. These messages left no doubt that the Committee and members had just cause to feel proud of the Society's achievements.

Mrs Lise Campbell, the able functions organiser arranged a full programme of films, lectures and field trips. During the year some attractive offers of reduced rates to members were received from game lodges and camps. There is no doubt that the highlight of the activities was three tours of Madagascar arranged and conducted by Mr Don Turner who knows the Island so well and was able to secure reduced airfares and hotel charges for members. These tours were fully booked almost as soon as they were announced. Mrs Donnelly wrote an ammusing and informative description of her visit in the March/April Bulletin.

In December 1978 the 1st Annual Nairobi Bird Census had been held with 62 members participating, this proved a popular activity and a full report was made in the January/February 1979 Bulletin. The monthly lectures were varied and well attended. Mr Clifton conducted a tour of the Entomology Department at the Museum in January and February saw Dr Owino lecturing on Conservation Status of Kenyan Forests. In March the 69th A.G.M. was held and in April Dr Ken Bock introduced us to 'The Coral Reef'. Dr Reyer spoke on 'Kingfishers at Lake Nakuru' in May, followed in June by Mr John Reynolds recounting his 20 years of birding in East Africa, illustrated with excellent slides. In July we heard about 'Wildlife in Ethiopia' from Dr Terry Stevenson and during August our lecture was on 'What does U.N.E.P. do about desertification'. Dr Ken Bock gave an illustrated lecture, 'An Introduction to Coral Reef Fishes' in September, a follow-up of his popular April lecture. The film 'Mysteries of the Green Mountain' was shown in October, November and December were covered by Dr Lambrecht's lecture on Tsetse fly research in the Okavango Swamp and Dr Wirtz who spoke on 'The Social Behaviour of Waterbuck'. The 2nd Annual Nairobi Bird Census was carried out in December with 108 members taking part, almost double the 1978 figure; with the larger number of participants a much better coverage was achieved. Each Wednesday morning throughout the year Mrs Fleur Ng'weno led her popular 'Bird Walk' and the Society is most grateful to her for organising this activity.

The National Museum held its 50th Anniversary Festival in June, the Society had a display stand in the new Mammal Hall showing its activities, this was admired and helped to increase membership.

Six issues of the Bulletin were produced, the Editor sending out his usual plea for copy early in the year and the history of the Society was published in these six issues. Three Journals were also produced.

The authors Dr L.H. Brown and Mr P. Britton, as well as the Editor, Mrs Jean Hayes, put in many hours of hard work on The Breeding Seasons of East African Birds. Donations were received from the E.A. Wildlife Society, the Chandaria Supplementary Foundation, Mrs J. Horne Short, Mr F.J. McCartney, Dr and Mrs G.C. Irvine and Mr R.P.N. Mennell towards the cost of this book. The Society's Ornithological Sub-Committee were also busy with the Birds of East Africa. The plates for this book were painted by Mrs Rena Fennessy and a list of 20 sponsors are printed on page xii. It was hoped that these books would be published to commemorate the Society's 70th Anniversary but due to many set-backs this was not possible. These very important books are now on sale in shops and at the Society's office.

A generous donation of Shs 3,200/- was received from Mr Arthur Loveridge of St Helena Island, the Society's first museum curator; past secretaries and editors should note that this was given in thanks for the publications he had received throughout the many years of his association with the Society. A donation of Shs 500/- was received from a life member, Dr Anne Spoerry of the Flying Doctor Service towards Bulletin costs.

Membership figures reached a record number during the year with a total of 823 plus 200 exchange members. Reluctantly the able Chairman of the past ten years, Mr John Karmali, announced the Executive Committee's decision that, due to rising costs, the annual subscription would have to be increased to Shs 70/- in 1980.

For the Society, which is run on a voluntary basis, 1979 was a very busy year and can certainly be regarded as a successful one.

E.B. Angwin

SHARING ONE'S HOUSE WITH GENETS

Mr R.J. Prickett's delightful article on Genets in Vol. 3, No. 6 issue of the magazine Swara reminded me vividly of my own experiences with Genets at Thika, Kenya. (Mr Prickett's fuller reminiscences appear in the EANHS Bulletins for November/December 1976 and January/February 1977). Late in 1969 I moved into an older type of house, rather isolated, on the railway station side of Thika High School grounds, facing the open country towards Oldonyo Sabuk. The bungalow had a high roof, and the ceiling boards inside were fastened directly against the roof timbers from the open overhanging eaves to a point two-thirds of the way up the roof where a horizontal ceiling fastened to cross-beams concealed the roof about a metre below the ridge. The roof itself consisted of red clay tiles.

For about a year after moving in, I had been aware of occasional noises in the roof, but I thought they were mice or rats. One dark evening in October 1970 as I went out the back door, I was stopped short by a warning growl. I thought at first there was a Leopard out on the road, but the noise came from above my head. Further growls made me shine my torch up the eaves between the roof beams, where there was a gap between the tiles and the ceiling board, just room for the fully-grown Genet which was warning me so plainly, its eyes - greenish-brown - reflecting the light quite defiantly.

A couple of nights later I was awakened at four in the morning by a scrabbling noise on the rough stonework outside my bedroom, and heard the protesting cries of a baby Genet, evidently being carried by its mother up into its new home in my roof. Thus commenced five and a half years of delightful acquaintance with the mother Genet and her successive litters (the later ones probably having been delivered in the roof - the twins were born above the kitchen).

My house had been 'up-graded' with ceilings fitted before I went into it - the carpenters had, however, not completed the flat central section of the ceiling above the cement-lagged immersion heater in the kitchen, and I gradually realised that the two Genets were coming down into the kitchen at night, using the down-pipes from the cold water tank in the roof. Having read that genets are "bloodthirsty predators", I occasionally encouraged them by leaving a little catmeat in a saucer, but rarely bothered to close the kitchen door into the hall when I went to bed. When I was cooking my evening meal, I began to realise I was being observed from above - the growing kitten indeed soon ventured down to sit on top of the immersion heater, and the beautific expression on its face as it savoured the aroma of my supper soon prompted the name Celestine. Mother was always more cautious but I had now seen enough to confirm from the lighter fur that, as one would expect at dry Thika, this was the Small-spotted or Common Genet, Genetta genetta. They moved - always at night - in and out of the house via a tree and the roof from their point of vantage at the eaves.

I soon had to revise my ideas about food for Genets. One night, ready to go camping the next day, I had the food all packed in the hall, including some packets of Queen Cakes. I hadn't closed the kitchen door, and in the morning to my astonishment, found that nearly all the cake packets had been torn open, and a lot of the cake consumed. After that, I made a point of shutting the kitchen door at bedtime; but second of buying special Queen Cakes for the Genets, placed by the immersion heater. I concluded that it was the sweetness and the strong egg flavour that made what my friends called the 'genet cakes' so attractive.

But there were more surprises. In those days one could buy in Arusha - manufactured in Tanzania - sweetened condensed milk, very useful on safari. One morning I found a discarded tin of this milk in the middle of the kitchen floor, licked completely clean. So, suitable diluted condensed milk was left in a saucer in the kitchen. One night I had a pupil in my study for extra coaching. The study shares one wall with the kitchen, and we heard a loud thump from the kitchen - we went to investigate. No Genets were visible but a glass jar of strawberry jam (with it's lid, of course, screwed on tight) was no longer on a high shelf above the sink but instead on the kitchen floor, so I put it back and we returned to our lesson. Ten minutes later we heard a similar thump, but we carried on with the lesson. Just before my student left we did look into the kitchen, and I was pleased to have a witness - the jam jar was on the floor again, but this time its lid had been unscrewed by those remarkable genet paws, and quite a lot of the strawberry jam had been consumed ! So another - quite expensive - item could be added to the list of delicacies which will attract genets.

Celestine turned out to be a male, and the mother tolerated his presence with her in the roof. It was over a year before I saw the father, who obviously came in from the bush very rarely. Both of them were sitting in the early part of the night on the top of the wall of the house just under the eaves. He was larger than her, with a very light-coloured fur, a fine animal, but wild, and he spat at me when I unexpectedly appeared below. Then I found Celestine liked sitting inside Land Rover bonnets on the engine - he would not move until I raised the bonnet and shone a light in. The next kitten was Joanna, and once she was old enough, she, Celestine, and often the mother, I deduced, would romp endlessly in the day on top of the flat ceiling section above the central part of the house. By now I had not only got some lovely movies by putting cake and strawberry jam on the kitchen floor - only mother did not like her photo being taken - I had also got used to the frenzied romping on the roof tiles which usually seemed to take place at 5 a.m. ! I had also found that genets have very sharp teeth - one evening I was having my supper when Celestine padded silently through from the kitchen and gave my ankle a real nip.

Sadly, Celestine was run over when about 18 months old, on the road near some of the godowns opposite the school's main gate. Mother shortly after saw Joanna off the premises for good, but soon two delightful twins who became very tame (although I never stroked them) appeared on the scene. Genets are very inquisitive, and sometimes, when working in the study, I would see two dark earnest-looking kittens coming round the door together, followed anxiously by mother. There were water pipes on either side of the immersion heater, and twin A always came down on my left to take cake out of my left hand, while twin B wanted warm condensed milk to drink from a cup in my right hand. These two both grew up and left the house, but there was one magic moment one night when they both returned for a feed, and, although they had grown and changed, each knew which pipe to come down and what to expect at the bottom.

I never ceased to marvel at their grace, their intelligence, their liking for human company, their uncanny agility on perpendicular surfaces and their adaptability. My fourth year at Thika saw the new sewage pipes laid in a trench ten metres deep drilled and blasted in the volcanic rock only five metres from the house. I thought the incessant drilling and the explosions would at least upset them, but they lived as usual, easily leaping the open ditch to cross to their hunting-grounds in the open country where the British Leyland factory would soon be built.

Of course, there is that unforgettable musky urine smell wherever there are genets, and they certainly urinated on the high ceiling, usually in the same spot, but it only once came through, narrowly missing my record player. I thought to myself, they're lucky its a bachelor in the house ! What wife would tolerate the spreading stain on the ceiling, or the 'stand-and-deliver' dominance of one's kitchen by three Genets who must have their cake before one could make one's early morning tea ? Or the nightly noisy dances on the roof, or a Genet coming in the bedroom window and trying to get inside the mosquito net ? But one look at my Genets on the immersion heater, sitting up on their hind legs like squirrels and solemnly eating genet cake held between their front paws, those long graceful tails trailing half-way down the heater, was more than compensation to me for the inconvenience of sharing one's house with genets.

P.J. Johnston, Nairobi School, P.O. Box 30047, NAIROBI

DRY SEASON TROUBLES

Virtually no rain has fallen at Karen, Nairobi this year and the land is parched. February and March is the period of the greatest leaf-fall for our indigenous forest trees, in anticipation of the rains that will trigger new growth. There is an acute shortage of food for monkeys, birds and even butterflies.

I reported in the July/August 1976 _Bulletin_ on the effects of the drought on my small troop of Syke's Monkeys, _Cercopithecus mitis_ and again this March they have taken to eating the succulent green creeping stems of _Cereus_ sp. (Cactaceae) from which they also obtain moisture. There are no trees carrying fruit in my forest except those of the pest creeper _Passiflora eichlerana_ normally distained and left for fruit bats, but the Sykes have been taking these soft green fruits. The monkeys are bold, coming right to the house to steal Cape Tomato fruits, unmindful of the dogs.

Again this year they spend much time on the ground carefully picking up termite-soil incrusted twigs in the hope of finding a few worker termites and they also scratch the termite runways up the trees in search of these tiny morsels.

There has been a dearth of sunbirds in the garden simply because so few plants are in flower. In this last month we have a pair of Eastern Double-collared Sunbirds, _Nectarinia mediocris_, the male was originally ringed in 1975; a pair of Variable Sunbirds, _N. venusta_ ringed in 1975 and re-ringed in 1976 and a pair of Collared Sunbirds, _Anthreptes collaris_, the male of which was ringed on 19.4.76. For these birds there are two _Strelitzia_ in flower and three or four flowers of _Nasturtium_ which the birds have now learned contain nectar and they now know how to probe the long spur. A few fuschias are probed time and again throughout the day. The tall purple _Salvia_ which was the sunbirds main nectar supply is flowerless.

The pink and white _Bougainvillia_ is now their mainstay for nectar. This I have always regarded as a last resort nectar flower for it is not visited when other supplies are available. There is little nectar in the small flowers, at most 3.7 lambdas (microlitres) in flowers that I have measured. It takes a lot of flowers to get a drop of liquid !

Competing with the sunbirds are a great number of *Papilio* (Swallowtail) butterflies which have appeared recently, the blue and black *P. nireus* and *P. bromius*, the yellow-spotted *P. mackinnoni* the yellow *P. nobilis* and the black and white *P. jacksoni*. Most of these are newly emerged specimens in perfect condition. Also visiting the *Boigainvillia* in unusually large numbers have been the day-flying Hawk Moths - the dark *Leucostrophus hirundo*, the green clear-winged *Cephonodes virescens* and the brown *Macroglossum trochilus*.

The most unusual bird to visit the garden and the *Nasturtiums* was a single Thick-billed Seed-eater, *Serinus burtoni*, which quickly took and ate four fruits, this must be an indication of food shortage as this species generally feeds in the tree-tops.

Water is in short supply and two pints per day are required to top up the bird-bath; so many birds are bathing and drinking. Dry seed feeders such as the Bronze Mannikins, *Lonchura cucullata*, the Red-billed Firefinch, *Lagonosticta senegalla*, the Red-cheeked Cordon Bleu *Uraeginthus bengalus* and the Streaky Seed-eater *Serinus striolatus*, are drinking several times a day. The other evening we had the unexpected pleasure of watching a pair of Hartlaub's Turaco, *Tauraco hartlaubi* drinking at the bird-bath. One took nine long drafts and the other seven. A little unusual to have these birds out in the open. Other species drinking regularly now are the two forest species, the Slender-billed Greenbul, *Andropadus gracilirostris* and the Yellow-whiskered Greenbul, *A. latirostris*.

By the varandah there is a small clump of Wine Berries (ra-straw-berry, a cultivated plant). This carries raspberry-like scarlet fruits, now much sought after as they are juicy. At one time feeding on the fruits were a pair of Northern Olive Thrushes, *Turdus abyssinicus*, three Montane White-eyes, *Zosterops poliogastra*, and a pair, believe it or not, of the White-eyed Slaty Flycatchers, *Melaeornis chocolatina*. Various other birds have now found that they can take these fruits, the sunbirds probe the druplets and inbibe the juice - the Streaky Seed-eater, Baglafecht (Reichenow's) Weaver, *Ploceus baglafecht*, Holub's Golden Weaver, *P. xanthops*, two Ruppell's Robin Chats, *Cossypha semirufa* and the Robin Chat *C. caffra*, and the two Greenbuls metnioned above have all been seen eating the fruit.

G.R. Cunningham van Someren, Bird Room,
National Museum, NAIROBI

THIRSTY BEES

My son, with friends, on 8th March 1981 , picnicing in Hell's Gate, Lake Naivasha, were invaded by Bees, *Apis* sp. which tried to swarm on their damp lettuce leaves, salad and sandwiches, thus becoming a nuisence. It was then noticed that Bees were also swarming over a wet patch of soil where the party had washed their hands. Ian had an idea, filled a plate with water and placed this at a distance from the picnic site. At once all the Bees in their hundreds congregated at this new water point and left the party alone despite the juicy sweetmeats and fruits. Water was what the Bees wanted and they continued to drink until the party left.

Members may note that vandals have opened up, damaged and then blocked with rubbish the 'cold-air blow hole' at the base of Fischer's Tower.

G.R. Cunningham van Someren

MORE THIRSTY BEES

With reference to Mr van Someren's note above, it is interesting to note that Bees have recently been in their hundreds at Parklands Sports Club swimming pool, Nairobi. In this case they appear to have been attracted by the sweet drinks swimmers consume - a bottle of Coko Cola, left for a minute, will contain 40 - 50 Bees. With no flowering trees or bushes in the area the Bees are having to obtain food from unusual sources.

Dennie Angwin

A NOTE ON STINK ANTS

On working through the ants in the collection of the National Museum, Nairobi, I came across some specimens of the Stink Ant, *Megaponera foetens*, which I had collected in the Sokoke Forest, Kenya Coast, in September 1975.

These ants form into groups of 30 to 40 and raid termite nests for food, taking away three or four termites per ant. If they are disturbed they give off an offensive smell, thus their common name, and they can make a kind of rustling noise by stridulating.

The two specimens which I found were a worker taken from one of these raiding parties together with a winged male which was also in the group. I do not know of any record of a male ant going on a foraging expedition with the workers, as they are usually as lazy as male bees. The group itself consisted of about 20 workers and five males. The workers had termites in their jaws but the males did not. When I disturbed the group to collect the sample for identification, the workers were ready to fight, and, contrary to what I had expected, the males did not fly away but huddled in the middle of a group of workers.

M. Clifton, Entomologist, P.O. Box 40658, NAIROBI

WATER LILIES AS A SOURCE OF FOOD

During a recent visit to Loiminange on the eastern shore of Lake Baringo, Kenya, I was interested to see women of the Njemps tribe grinding the seed of the blue water lily, Nymphaea capensis into flour to cook as ugali.

On enquiring, I was shown how the women collect the mature seed pods and dry them in the sun before extracting the seed. The seed, which is the same size as that of finger millet, Eleusine coracana, is ground on the normal flat stone and is cooked either on its own or mixed with finger millet when available.

I was told that the root corms are also cooked and eaten like potatoes.

I was offered a dish of water lily ugali to try, but as there was no milk to go with it I decided I wasn't feeling sufficiently hungry.

It seems that Nymphaea capensis provides a useful dietary supplement for Njemps people living near those parts of the lake where it grows. At present the amount available has been much reduced by the recent drop in lake level. It may take some time for the plant to adjust to the new level.

Enquiries made so far suggest that the Tugen and Pokot peoples living round the western and northern shores of the lake are not aware of the culinary possibilities provided by this plant. This may be because they are comparative newcomers to the lake.

Since Nymphaea capensis grows commonly on lakes and dams in many parts of Kenya, and could be easily introduced where it is not already present, it may provide a useful additional source of food for people living near such water if they could be persuaded to eat it. It is well worth introducing to dams for its flower which is most attractive.

If anyone is interested in analysing some of the seed to find out its nutritional value I can provide a sample.

Roddy MacGregor, P.O. Box 137, ELBURGON, Kenya

USE OF WATER LILY SEEDS

Dennie Angwin brought me Mr MacGregor's letter to read, "Interesting", I said, "but I've seen a reference somewhere". That evening I said to Ellinor, my wife, "what do you know of 'lotus-eaters'", and mentioned the fact that somewhere I had read about water lily seeds being eaten. She agreed and thought that it maybe Australian or South American and recalled a colour photograph of "folk entering the water to collect lily seeds". She reached up to the bookshelves and pulled out a book Walk About by Charles and Elsa Chauvels (1959) and thumbed through it - "no index" - and put it down. I opened it casually and as it happened, at page 235 the word 'Lilies' caught my attention.

"Red lily lagoon - for these lilies have at the base of the flower a large pod filled with edible wild green peas - - Malbibi ground some lily pods up and cooked little cakes in the ashes - - prodding and squeezing the little wild pea pods from the core of the lilies. I later boiled these in our billy can".

It is a long way between the Njemps of Baringo and the Aboroginies of Australia, but the indigenous people of both continents have found a use for water lily 'fruits' (and seeds) as an article of food.

I turned to the map of the journey undertaken by the Chauvels to try and locate the site of 'lotus eating' and inadvertently opened the book at a colour plate entitled 'Aborigine women searching lagoon for lily pods'.

G.R. Cunningham van Someren

RHINO STATUS

The excellent report on 'The International Trade in Rhinoceros Products' by Esmond Bradley Martin is a "must" for all interested in the future of the rhinoceros. The Report, however, does underestimate the seriousness of the decline in rhino populations.

Present populations are far more likely to be only 1% of those of early and mid-19th century rather than 10%. Similarly the decline since 1970 is far more serious than a 50% reduction and is of the order of 90% with, for example, a reduction in Kenya from some 12,000 in 1970 to 1,200 or less today. Accurate figures are not available.

It should be borne in mind too that not all the destruction has been due to poachers but to deliberate policies of elimination by former Colonial governments and to excessive legal hunting condoned by the government. Poaching has only become of importance when the stocks have fallen so very low. The clearance of a thousand rhinos in the Makueni area by J.A. Hunter was to facilitate bush clearance for agricultural development, carried out under the instructions of the then Chief Game Warden. The killing of tens of thousands of animals by the government eliminated large numbers of rhinos in a futile attempt to eradicate tsetse fly. The rhino has not always been seen as a "priceless heritage" but as a thorough nuisance.

E.T. Monks, WWF Kenya, P.O. Box 24603, NAIROBI

COMPOSITION OF KENYA'S AVIFAUNA

The publication by the Society of The Birds of East Africa, edited by Peter Britton, makes it possible to estimate the numbers of species in various categories, as shown in the Table. The total of 1049 excludes 3 introduced species, and seven whose reported occurrence has not been confirmed.

I would like to emphasise that all the figures in the

Table are approximate; for various reasons, e.g. :-

- in a number of cases, the specific status of a bird is, as yet, uncertain.

- several species have not been recorded for a number of years.

- the status of individual species is, in a good many cases, a matter of opinion. For instance, are Cranes water birds ? A number of species have both resident and non-resident races, an obvious example being the Black Kite. For these, I have opted for the category which seemed likely to contain most individuals (no species was included more than once).

Given these limitations, one might note that 80% of the species recorded breed within Kenya, although a few of these have not been confirmed in recent years. Land-birds (generally those which only visit aquatic habitats for drinking, or not at all) make up 80% of the total, but 88% of breeding species. Almost half the 164 Palearctic migrants are water birds.

Approximate numbers of species of birds in various categories

		Land birds	Water Birds		TOTALS
			Exclusively marine	Others	
BREEDING SPECIES					
	Resident	704	5	93	802
Migrants	Inter-African	25	0	4	29
	Palearctic	7	0	2	9
TOTALS		736	5	99	840
NON-BREEDING SPECIES					
Local wanderers		0	9	9	18
Migrants	Inter-African	27	4	5	36
	Palearctic	80	6	69	155
TOTALS		107	19	83	209
MIGRANT TOTALS					
	Inter-African	52	4	9	65
	Palearctic	87	6	71	164
OVERALL TOTALS		843	24	182	1049

D.E. Pomeroy, P.O. Box 43844, NAIROBI

EXTRA-ORDINARY GENERAL MEETING

An Extra-ordinary General Meeting of the East Africa Natural History Society will be held on Monday 13th April 1981 at 5.30 p.m. in the Museum Hall, Nairobi, before the lecture.

AGENDA

To approve the Accounts for the year 1980, with the Hon. Treasurer's Report. (Note: these were unfortunately not ready for the A.G.M. held on 9th March 1981.

MEMBERS ADVERTISMENTS

WANTED A copy of 'Common Fresh Water Fishes of East Africa' or any similar publication. Please contact Mr J. Worth, P.O. Box 50708, NAIROBI, 'phone 558606.

FOR SALE Olympus OM10, automatic 35mm SLR, with off-the-film metering. Brand new. With 50mm (normal) lens, 135mm telephoto. 37 - 105 zoom-micro lens too. 2x magnifier. Full set of extension tubes for 'close-up at a distance'. Haze filters on all lenses. Bargain at Shs 8,000/-. Please contact Gordon Brown, P.O. Box 42493, NAIROBI, 'phone 22868.

CARETAKER WANTED for a house at Naro Moru, on the Naro Moru River. Suitable family or couple sought to caretake, free of charge, from 15th July to early September. Must be capable of looking after four ponies, dogs etc. Please contact Mr C. Orme-Smith, P.O. Box 78, NANYUKI.

LEAVE ACCOMMODATION Three bedroom, fully furnished, centrally heated flat on the Sussex coast, near Chichester; in a quiet position a few minutes walk to a private beach. Please contact Mr Gray, P.O. Box 52428, NAIROBI.

TERRESTIAL SNAIL ENTHUSIAST WANTED for voluntary help on the collections of the National Museum. Specimens also needed with full data. The 'persuit' of snails does not involve a great deal of energy, except maybe turning over logs in the forest or a walk to the collecting locality ! Any interested members please contact van Someren in the Bird Room at the National Museum, NAIROBI, P.O. Box 40658, NAIROBI.

CHECK-LIST OF THE BIRDS OF KENYA

A 40 page list with English and scientific names as used in the Society's Birds of East Africa. Four columns are provided alongside each bird for ticking.

Prices for Society members :

1. To personal callers at the Society's office in the National Museum, Nairobi: Shs 10/- per copy.

2. By surface mail in East Africa: Shs 12/- per copy.

3. By airmail in East Africa: Shs 15/- per copy.

4. By surface mail to anywhere in the world : Shs 12/- per copy or Stg £ 0.70 or US $ 1.50.

5. By airmail to anywhere in the world : Shs 18/- per copy or Stg. £ 1.00 or US $ 2.20.

All postal orders to D.A. Turner, P.O. Box 48019, NAIROBI. Cheques and drafts made payable to BIRDS OF EAST AFRICA please.

SOCIETY NOTES

Birds of Africa by our Chairman, Mr John Karmali. Copies are still available at a special members discount of Shs 225/-.

Birds of East Africa edited by Peter Britton and written by the Ornithological Sub-Committee of the Society. Available from the Society's office at Shs 130/- per copy. Cheques should be made payable to BIRDS OF EAST AFRICA please.

A Field Guide to the Birds of East Africa by John Williams and Norman Arlott. The Society has at last been able to obtain copies of this new field guide for its members; the discount price Shs 160/-. Please place your orders with the Secretary - stocks are in short supply.

Check-list of the Birds of Kenya just published by the Society and compiled by the Ornithological Sub-Committee is now on sale. For full details please see page 32 of this Bulletin.

Breeding Seasons of East African Birds by Leslie Brown and Peter Britton, published by the Society. Members price Shs 80/- including local surface mail postage. Please place your orders with the Secretary, P.O. Box 44486, NAIROBI.

Bundu Books The following Bundu Books, published by Longmans in the former Rhodesia are now available locally. It is an excellent series, and, although based on Zimbabwe, many of the species covered are found here. The Society will be able to obtain a substantial discount on these books if members are interested; please place your orders through the Secretary. A full set of the books are available for viewing in the office; all are very well illustrated.

Birds of the Highveld	Shs 35/-
Birds of the Lowveld	Shs 40/-
Bundu Book 1 (Trees, flowers, grasses)	Shs 35/-
Bundu Book 2 (Birds, insects, snakes)	Shs 35/-
Bird Safari	Shs 40/-
A Field Guide to the Aloes of Rhodesia	Shs 45/-
Common Trees of the Highveld	Shs 30/-
Flowers of the Veld	Shs 30/-

Butterflies of Rhodesia Shs 40/-
Snakes of Rhodesia Shs 55/-
Some Well Known African Moths Shs 45/-

Bulletin Copy Needed as usual. Please members, do write up your trips and observations. Many of you must spend time out but the interesting things you see are rarely published - the shortest notes would be welcome. Contributions please to The Editor, P.O. Box 44486, NAIROBI.

Voluntary Help Needed especially in producing the Bulletin. At the moment the Society is very short of working space but hopefully by July we will have moved to newer spacious quarters - then there will be room for several volunteers to work at once. If you could give us a morning or afternoon at the end of every second month (April, June, August, October, December, February) it would be most welcome. Our thanks to those who have already offered.

Application Forms are included with this Bulletin. Please hand them round to your friends, especially to people new to the country so that they can benefit from membership. We hope that 1981 will be another record year - this can only be done with your help.

Kajiado Camp in January Members who came to the weekend camp at Kajiado and were disturbed to see the big old Acacias being cut down for charcoal may like to know that some action has been taken. Dr Darlington, the leader of the camp, and a Kajiado resident, reported the matter to the Sub-Chief Ole Seki and took him to inspect the damage. He took the matter up with the D.C. and as a result two men were prosecuted and jailed for a month each. It does not bring back the trees but let us hope the example will discourage some future profiteers. Thank you Dr Darlington.

Lecture dates Members are reminded that the Society has a lecture or film on the second Monday of each month. Please make a note of this and keep the evening free.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Mrs Donald Allan, c/o UNICEF, P.O. Box 44145, NAIROBI
Ms Celia Bartlett, P.O. Box 24817, NAIROBI
Mrs Mavis Bennon, P.O. Box 21149, NAIROBI
Mr L.J. Bharadia, P.O. Box 43414, NAIROBI
Miss M.F. Bradfield, Kenton College, P.O. Box 30017, NAIROBI
Mr Richard Carter, P.O. Box 43387, NAIROBI
Dr John P. Dittani, P.O. Box 33, NAKURU, Kenya
Mrs Dorothy Dobson, c/o United Kenya Club, P.O. Box 42220, NAIROBI
Mrs Clare Doig, P.O. Box 730, NAKURU, Kenya
Mr Nicholas Georgiadis, P.O. Box 42851, NAIROBI
Ms Glynis Gordon, Nairobi Academy, P.O. Box 24817, NAIROBI
Ms Nuala Greene, P.O. Box 30659, NAIROBI
Mr J. Th. Helmer, P.O. Box 67912, NAIROBI

Mr and Mrs Malcolm Hucker, P.O. Box 21736, NAIROBI
Mrs Carole C.M. Hughes, P.O. Box 14701, NAIROBI
Mr Michael R. Hulton, P.O. Box 67553, NAIROBI
Leslie Leonard, P.O. Box 47098, NAIROBI
Ms Clare Miller, Enguli Secondary School, P.O. Box 10, SULTAN HAMUD, Kenya
Ms Gina Naplocha, c/o Nairobi Academy, P.O. Box 24817, NAIROBI
Mrs A. Narishkin, United Kenya Club, P.O. Box 42220, NAIROBI
Mr Christopher Neilson, P.O. Box 46578, NAIROBI
Miss E. Phillips, P.O. Box 4, NAIVASHA, Kenya
Ms Clare Poulter, P.O. Box 43640, NAIROBI
Mr and Mrs G.M. Rehm, Soysambu Estate, P.O. ELMENTEITA, Kenya
Mr and Mrs R.W. Robinson, 'Bata', P.O. Box 23, LIMURU, Kenya
Ms Alison M. Ross, The Grange School, P.O. Box 42782, NAIROBI
Mr and Mrs T.P.K. Scade, P.O. Box 40577, NAIROBI
Mr and Mrs Scarlett, P.O. Box 30158, NAIROBI
Mr and Mrs M.W. West, P.O. Box 21471, NAIROBI
Mr Graham Wickenden, P.O. Box 40612, NAIROBI
Mr Ken Williams M.B.E., P.O. Box 30181, NAIROBI
Ms Miranda Wolpert, Gachoire Harambee Secondary School, P.O. Box 73, GITHUNGURI, Kenya

Local Institutional Member

University College of Eastern Africa, P.O. Box 2500, ELDORET, Kenya

Local Junior Members

Lydia M. Alubale, P.O. Box 30553, NAIROBI
T. Castren, Baringo House, Nairobi School, P.O. Box 30047, NAIROBI
Paskalia Chuma, P.O. Box 60381, NAIROBI
Kiritu J. Gachuki, Kenyatta University College, P.O. Box 30553, NAIROBI
David Kimanthi, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
Patricia Kimanthi, P.O. Box 30553, NAIROBI
Dilip Lakhani, P.O. Box 40140, NAIROBI
U.J. Mahero, Kerinyaga House, Nairobi School, P.O. Box 30047, NAIROBI
P.M. Mbogho, K.U.C., P.O. Box 30553, NAIROBI
Peter Gitonga Micheni, Bl 21, Rm 1D, P.O. Box 30553, NAIROBI
Moffat Mwangi, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI
A.T. Mwenda, Marsabit House, Nairobi School, P.O. Box 30047, NAIROBI
Peter M. Ndungu, K.U.C., P.O. Box 30553, NAIROBI
Richard Ngene, Baringo House, Nairobi School, P.O. Box 30047, NAIROBI
Onam W.B. Odhiambo, Faculty of Agriculture, P.O. Box 29053, NAIROBI
James Olopondo Oleminis, K.U.C., P.O. Box 30553, NAIROBI
Bucha K. Thomas, K.U.C., P.O. Box 30553, NAIROBI
George Kamau Wakai, P.O. Box 58187, NAIROBI

Overseas Full Members

Dr A. Kortlandt, Universireit van Amsterdam, Nieuwe Prinsengracht 126, 1018 VZ AMSTERDAM, Holland
Jill McLean, 5 Tunstall Ave, SENNEVILLE, Quebec, Canada
Mr and Mrs Arthur Sestak, P.O. Box 1615, Novato, California 94947, U.S.A.

SOCIETY FUNCTIONS

Sunday 29th March 1981 A day trip to study birds will take place in the vicinity of Nairobi. Leader: Miss Priscilla Allen. Please meet in front of the National Museum, Nairobi at 8.45 a.m. and bring a picnic lunch if you wish to stay the whole day.

Monday 13th April 1981 in the Museum Hall, Nairobi at 5.30 p.m. Extra-ordinary General Meeting (please see page 32 of this issue) to be followed by the 35 minute film 'Dusts of Kilimanjaro' shot in the Amboseli area, kindly loaned to us by the Wildlife Clubs of Kenya.

Friday 17th April to Monday 20th April 1981 Easter Weekend camp to Ngare Ngare Farm by kind invitation of Mr and Mrs Dyer. This farm is in very interesting country between Timau and Isiolo. Leader : Mrs Daphne Curtis. If you would like to participate in this camp, kindly fill in the enclosed form and return it, with a stamped addressed envelope, to : The Secretary, EANHS, P.O. Box 44486, Nairobi as soon as possible. Full details will then be forwarded to you.

Monday 11th May 1981 in the Museum Hall, Nairobi at 5.30 p.m. Members Slide Show. Members are requested to bring 10 of their best slides to the Museum Hall by 5.15 p.m. and to tell the audience about them.

Friday 29th May to Monday 1st June 1981 Madaraka Day camp to the Chyulu Hills kindly organised by Mr Peter Johnston and junior members from Nairobi School. It is hoped that some members from the Cave Exploration Group will also be able to participate and maybe show members some of the caves in the area. A botanist and ornithologist will also be in attendance. If you would like to take part in this camp, please fill in the enclosed form and return it, with a stamped addressed envelope to The Secretary, EANHS, P.O. Box 44486, Nairobi before 20th May 1981. Full details will then be forwarded to you.

Monday 8th June 1981 Lecture. Details later

Sunday 14th June 1981 Botanical day trip. Details later.

Special Discount offer at Lake Baringo Lodge Please see the January/February Bulletin for full details.

Special Discount Offer at Hunter's Lodge Please see the January/February Bulletin for full details. Members are requested to note that the booking agent has moved and can now be contacted at Emperess Fashions, Eagle House, Kimathi Street, opposite Corner House. Telephone numbers 21439 and 20592. To take advantage of both these offers members are reminded that a current membership card must be shown when making the booking.

Wednesday morning bird walks, led by Mrs Fleur Ng'weno meet every Wednesday morning, rain or shine, in front of the Museum at 08.45 sharp.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Dr. A. Hill.
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Dr. J. Gerhart, Dr A. Hill, Dr F. Owino, Dr D.J. Pearson.
Co-opted Members: Mrs H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Mr S.G. Njuguna.
Journal Editorial Sub-Committee Mrs J. Hayes, M. Gilbert, Dr. A. Hill,
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. J.D. Gerhart, B.S. Meadows, Prof. D.E. Pomeroy, Dr. E.D. Tweddell, P.L. Britton, Mrs. H.A. Britton, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), C.F. Mann, J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee (Society representatives) Dr. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margines, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 50/- p.a., non-EANHS members KShs. 75/- p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: Kshs. 750/-
Institutional (schools, libraries)	annual payment: Kshs. 70/-
Full Local and overseas	annual payment: Kshs. 70/-
Junior (full-time student, no **Journal** supplied)	annual payment: Kshs. 10/-

Subscriptions are due 1st January. From 1st July you may join for Kshs. 35/- and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
~~SI~~
NH

E A N H S

BULLETIN

SMITHSONIAN
OCT 1981
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN MAY/JUNE 1981

CONTENTS

Chairman's Report for 1980 38
A Note on the Identification of Cane Rats with Records from Dar es Salaam 41
Notes on Two Diurnal Geckos, *Lygodactylus picturatus* and *Phelsuma dubia* 43
Interactions Between Patas Monkeys and Three Species of Raptorial Birds 45
Birds of Kenya: A Review of Useful Identification Books.. 47

Book Reviews:

Birds of East Africa 50
Snakes of Rhodesia 53
Butterflies of Rhodesia 53
Some Well Known African Moths 53
EANHS Field Trip near Ngong Hills 54
Members Advertisments 55
Extra-Ordinary General Meeting 55
Society Notes 55
New Members 56
Society Functions 57

CHAIRMAN'S REPORT FOR 1980

The Chairman opened his report by welcoming all members present at the 71st Annual General Meeting. It had been another busy, productive year and much had been achieved in spite of a few problems.

The two major works scheduled for 1979 were eventually published during 1980 and had been well received. Mrs Jean Hayes, the Hon. Editor, had brought to a satisfactory conclusion the momentous task of getting the Breeding Seasons of East African Birds published. Many problems which had arisen with the printers had been dealt with most competently by her and she deserved a special vote of thanks for her hard work and perseverence over a long period.

It was sad to note that Dr Leslie Brown, the co-author with Peter Britton, died the day the first copies of the book became available and he did not see it. However, this important paper would prove a fitting memorial to the memory of this outstanding scientist who made such a major contribution to the affairs of the Society of which he was president at one time.

Of the 1,000 copies ordered, 883 were delivered at an approximate cost of Shs 46,700.00. Donations of Shs 20,950.00 made towards this meant not only that the Society would break even, but show a profit when all the copies had been sold.

The Ornithological Sub-Committee was entirely responsible for the second important work, the Birds of East Africa. Its members wrote and edited it, saw it through the press and found funds through donations and advance sales to pay for its publication. In this they were helped by individuals and firms who generously sponsored the paintings by Rena Fennessy which formed the attractive colour plates. The Sub-Committee had also taken over the responsibility of marketing the book.

Already 1,400 copies of the initial printing of 5,000 had been sold and the title, which supplied a major need, promised to be a steady seller for many years, thus providing a regular source of income which the Executive Committee had ear-marked for future publications.

A 'spin-off' of the main work was the anticipated early publication of the Kenya Check-list with those of Uganda and Tanzania to follow. It was hoped to publish a detailed financial statement of the Sub-Committee's publications in the 1981 accounts.

A real co-operative effort by all members of the Ornithological Sub-Committee which deserved the Society's heartiest congratulations and thanks, especially to Peter Britton, the editor; David Pearson, the chairman; Don Turner, the Secretary/Treasurer and Graeme Backhurst. All this work was in addition to the publication of Scopus and the Annual Bird Report, which continued to appear regularly.

The new building of the Division of Natural Sciences of the National Museum was expected to be ready by the middle of the year and as a consequence of the moving out of the various departments to their new accomodation, a great deal of space would become available in the old premises.

One of the main benefeciaries of the re-organization would be the Joint Library of the Museum in which the Society had a major interest. It would at last be possible to expand the Library, something which had been needed for a long time, so that adequate space would be available for all books and other publications.

A comprehensive report on the Joint Library had been prepared by Mr David Overton, a technical advisor on libraries from Britain. He had emphasized the inestimable value of the Society's part of and contribution to the Library and his report with its far-reaching recommendations would provide a blue-print for many years to come. The Museum had in recent months employed three qualified librarians and it was planned to recruit other technicians. It appeared that the Joint Library was now set for a long overdue and very necessary expansion and development.

Dr John Kokwaro, the able Vice-Chairman of the Society was also the Hon. Librarian and he was thanked by the Chairman, not only for holding the fort so effectively in his occasional absence, but also for watching the interests of the Society as far as the Library was concerned.

Two members of the Executive Committee who made the Society function as well as it did deserved a special mention. They were Denise Angwin, the Hon. Secretary/Treasurer and Mrs Eileen Angwin the Asst. Hon. Secretary/Treasurer. They both worked on an entirely voluntary basis and between them ran the office almost full-time, kept accounts, attended to correspondence, sold books and publications, prepared and mailed the Bulletin and carried out a variety of other functions. The Society was very grateful for their dedication.

The Society was very fortunate in having an active Executive Committee, members of which made considerable contribution to its well-being, quite often in a quiet manner behind the scenes. Mike Clifton was editor of the Bulletin; Mrs Jean Hayes, Andrew Hill and Mike Gilbert, the Joint Editors took care of the scientific Journal; Mrs Hazel Britton continued to organize the Nest Record Scheme; Mrs Lisa Campbell worked hard, sometimes under great difficulties, to provide an interesting programme of lectures and outings; David Pearson chaired the very lively and active Ornithological Sub-Committee; Mrs Fleur Ng'weno continued to lead the very popular Wednesday morning bird walks and Graeme Backhurst, the Bird Ringing Organizer, with a group of also unpaid and dedicated ringers carried out important work which was now beginning to attract international attention. They all had earned our sincere thanks.

Membership of the Society continued to be satisfactory. The year 1980 set a new record figure of 836, beating the previous year's figure by 8. However, continuous effort was necessary on the part of all members to enrol new members to replace the inevitable high wastage every year. The meeting was requested to renew the mandate given last year to increase the annual subscription of the Society to Shs 100.00 if found necessary, though this was unlikely in view of its healthy financial state. (Note: This was approved, being proposed by Miss P.M. Allen and seconded by Mrs D. Curtis).

The showing of the David Attenborough's video series 'Life on Earth' early in 1980 through the generosity of Mr Alan Root, had been a great success, with considerable funds accruing to both the E.A. Natural History Society and the Kenya Museum Society. The Committee was keeping a look out for similar programmes for future showings, but these were not easy to come by.

Before concluding his report, the Chairman felt that it was necessary to draw the members' attention to a matterewhich was causing him some concern.

The activities of the Society had expanded tremendously in many directions in the last few years and the fact that membership continued to increase steadily meant that it was supplying the needs of its members. From this it followed that the burden on the members of the Executive Committee, who all worked on a voluntary basis, had also increased greatly. While they continued to carry out their functions willingly, it was becoming apparent that the work load was falling on the same few people. For example, for the last many years, no new names for the Executive Committee had been forthcoming from the members of the Society in spite of requests in the Bulletin before every Annual General Meeting, and the Committee was left to propose names to fill its vacancies.

It could be argued that this was because the Society was satisfied with the work of its Committee and did not want any change; but there were obvious inherent dangers in such a situation. The Society had always had a proud record of work done by volunteers and this was an appeal to members to give serious thought to the matter and come forward with offers of help. They could do this in many ways. For instance :

(a) they could offer themselves or put up other names for the Executive Committee at the appropriate times;
(b) the Committee had powers to co-opt as many members as necessary, and therefore those nominated for it, but not getting elected because of its limited membership, could be co-opted;
(c)volunteers were needed at the end of every second month to help collate, assemble, staple, address and despatch the bi-monthly Bulletin;
(d) the Programme Organizer was always keen to hear of any good speakers, places for day or week-end field trips and volunteers to lead such outings;
(e) special jobs came up occasionally, needing help. For example, the Hon. Secretary would have been very happy to have someone to help and summerize the figures for last December's Annual Bird Count.

It was expected that the re-organization of the Museum mentioned earlier would make it possible for the Society to have extended room for an office, work-room and store. So there would be appreciably more space for volunteers to work in by the middle of the year.

Therefore all Society members willing to give some time or help in other ways, were requested to get in touch with the Hon. Secretary.

Finally, the Chairman again thanked all the elected and co-opted members of the Executive Committee for their dedicated work and also for their support to him.

A NOTE ON THE IDENTIFICATION OF CANE RATS, WITH RECORDS FROM DAR ES SALAAM

There are two species of Cane Rat in Africa according to Missone (1971), though Rosevear (1969) recognises more. These are the Larger Cane Rat, *Thryonomys swinderianus*, and the Lesser Cane Rat, *T. gregorianus*, both of which occur in East Africa. Cane Rats are members of the rodent family Thryonomyidae, with hair modified into bristles. Kingdon (1974) prefers the common name Marsh Cane Rat for *T. swinderianus*, and notes that the species is semi-aquatic, found in reed beds and grassy areas at the edge of fresh water. It weighs from 5.5 to 8.8 kg. *T. gregorianus*, which Kingdon names the Savanna Cane Rat, weighs less, from 2.7 to 7.5 kg, and prefers grassy hills and savanna. In Kiswahili, both species are known as 'ndezi', and are popular as food in many parts of East Africa. They may be locally abundant, Kindgon citing a density of 200/sq mile in Uganda. In West Africa, where they are known as Grasscutters, Cane Rats are intensively hunted and are a very important source of animal protein. At a single market in Accra, 78,073 kg of Cane Rat meat were sold in a year at a cost of about 1,209,600 E.A. shillings (Asibey, 1974). Ajayi (1971) has suggested that these animals might be managed on a sustained yield basis for food in West Africa.

Although they are widely distributed in sub-saharan Africa, and are both food items and at times agricultural pests, trying to identify Cane Rats using the more popular guide books is not easy. Some authors omit one species, and the information presented is sometimes confusing. Ansell (1960) describes Larger Cane Rats in Zambia with head and body length of 15 - 21 inches, hindfoot of 3 to 3.5 inches, and with a short tail. Bere (1962) simply notes a size difference between the two species. Smithers (1966) records the Larger Cane Rat as having an overall length of 24 inches and weighing about 2 lbs; he also mentions that the species has a very short tail. Williams (1967) mentions only the Larger Cane Rat, giving an overall length of 15 in and a tail of 3 in. Dorst and Dandelot (1970) record the Larger Cane Rat as of a greater size and with a longer tail than the Lesser Cane Rat, listing the former with a head and body length of 20 - 24 inches and a body weight of up to 16 lbs.

In a key to the species, Missone (1971) states that the skull of the Larger Cane Rat is much more arched anteriorly while that of the Lesser Cane Rat is very little arched anteriorily. But such a character is not useful in the field, and is very subjective even if a large number of skulls is available for comparison. The same author does not mention differences in other characters, such as size of skull, length of hindfoot, and length of tail. Rosevear (1969), Kingdon (1974) and Delaney (1975), however, point out that when viewed anteriorly, there is a difference in the pattern of the groves in the upper incisors for the two species. In the Larger Cane Rat, the outermost of the three grooves in the upper incisors is situated almost exactly in the mid-line of the tooth, while in the Lesser Cane Rat, the outermost of the three grooves is situated nearer the outside edge of the tooth. Rosevear and Delaney also note other characters useful in distinguishing the two species. The Larger Cane Rat has a head and body length of about 600 mm with a short tail which is at least as long as the hind foot; females of this species have three lateral pairs of teats. In contrast, the Lesser Cane Rat is smaller than the Larger, with a tail not more than one-third the length of the hindfoot, and with only two pairs of teats in the female.

Neither Swynnerton and Hyman (1950) nor Kingdon (1974) record either species of Cane Rat from the Dar es Salaam area. The nearest record to Dar es Salaam by the former authors for the Larger Cane Rat is Tanga; they record the Lesser Cane Rat only from Karema, Mpanga District. Kingdon's distribution map for the two species indicates sight records for both species near the mouth of the Pangani River and a specimen of the Larger Cane Rat from Bagamoyo. Two records of Cane Rats from near Dar es Salaam are therefore of interest.

On 10th December 1970 at Wazo Hill, 11 km north of Dar es Salaam, the skull of a Cane Rat was found in an area of secondary growth near a maize plantation. Other bones were present, but these were cracked and surrounded by the remains of a fire; probably the animal had been cooked and eaten by local inhabitants. On 18th April 1975 a Cane Rat was brought to the Zoology Department of the University of Dar es Salaam by grounds workers. The animal, a non-adult male which had been killed on the campus during grass-cutting with a tractor-mounted rotary mower, had the following measurements in mm : overall length, 395; hindfoot 86; ear, 35. No external tail was visible and no sign of scars or recent injury were found to indicate its former presence. Rosevear (1969), however, has noted that the tail of Cane Rats is easily broken. The skull of this animal, catalogued as UDSM-M-177, is 80 mm in length. Using the groove patterns of the upper incisors as illustrated in Kingdon and Delaney and described above, both these specimens were identified as _T. gregorianus_.

Delaney has called attention to the problems of identifying Cane Rats. Despite their abundance and wide distribution, they are not well-represented in museum collections. This may be because of their bristles and large size, which make the preparation and storage of study skins difficult. Nevertheless, much more data from specimens is needed before distinctions using body measurements and skull characteristics can definitely be made for the two species.

REFERENCES

Ajayi, A. 1971 Wildlife as a source of protein. _Nigerian Field_. Cited in Kindgon, 1974.
Ansell, W.F.H. 1960 _Mammals of Northern Rhodesia_. Government Printer, Lusaka, 155 pp.
Asibey, E. 1974 The Grasscutter, _Thryonomys swinderianus_ Temminck, in Ghana. _Symposium of the Zoological Society of_ London 34; 161-169.

Delaney, M.J. 1975 The Rodents of Uganda. British Museum (Natural History), London, 165 pp.
Dorst, J. and Dandelot, P. 1972 A Field Guide to the Larger Mammals of Africa. Collins, London, 287 pp.
Kingdon, J. 1974 East African Mammals, Vol. IIB. Academic Press, London, 704 pp.
Missone, X. 1971 Rodentia. In Meester, J. and Setzer, H.W. (eds.), The Mammals of Africa, an Identification Manual. Smithsonian Institution Press, Washington, D.C.
Rosevear, D.R. 1969 The Rodents of West Africa. British Museum (Natural History), London, 604 pp.
Smithers, R.H.N. 1966 The Mammals of Rhodesia, Zambia and Malawi. Collins, London, 159 pp.
Swynnerton, C. and Hayman, R.W. 1950 A Checklist of the Land Mammals of the Tanganyika Territory and the Zanzibar Protectorate. Journal of the East Africa Natural History Society 20: 274-392.
Williams, J.G. 1967 A Field Guide to the National Parks of East Africa. Collins, London, 352 pp.

K.M. Howell, Dept. of Zoology, University of Dar es Salaam,
P.O. Box 35064, DAR ES SALAAM, Tanzania

NOTES ON TWO DIURNAL GECKOS, LYGODACTYLUS PICTURATUS AND PHELSUMA DUBIA

There are about 33 species of geckos (lizards in the family Gekkonidae) found in East Africa (Loveridge, 1957) and because some of these share man's buildings they are perhaps the most familiar of reptiles. One of the commonest species, the grey Common House Gecko, Hemidactylus mabouia, has a snout to vent (s-v) length of about 86 mm and a tail (t) length of about 100 mm (these and other measurements from Loveridge, 1947), and is one of the species often seen on verandahs or in rooms at night feeding on a variety of arthropods attracted to lights. Like the majority of geckos it is largely nocturnal, but may be active during the day under conditions of low light intensity such as are found in the shade of buildings, trees etc.

A few species of geckos are diurnal although it is believed that even these forms came from originally nocturnal ancestors (Walls, 1942; Underwood, 1954). Two diurnal geckos found in East Africa are the Yellow-headed Dwarf-Gecko, Lygodactylus picturatus picturatus, and the Green Day Gecko, Phelsuma dubia. The Yellow-headed Dwarf-Gecko is small (s-v about 80 mm, t about 40 mm) and is common on trees and exterior surfaces of buildings; depending on its sex, temperature and emotional state, an individual may have a bright yellow head with a blue body or may be mottled brown or almost black in colour. Members of the genus Lygodactylus are unusual because in addition to transverse lamellae on the flattened tips of the digits, similar lamellae are also found on the tip of the tail. Kastle (1964) studied members of these two diurnal genera in captivity. Greer (1967) studied the ecology of L. picturatus keniensis and L. somalicus battersby in south Turkana. He found that these two species, in addition to feeding during the usual daylight hours, fed 15 - 30 minutes before sunrise and after sunset and noted that of the diurnal lizards in his study area, they had the longest activity periods. A large variety of invertebrates, including termites, were recorded as food items by Greer, and he observed geckos licking the exudate of Acacia trees. Howell and Mng'ong'o (1978) reported L. picturatus eating the honey of stingless bees, Trigona sp.

On 17th December 1977 at 20.00 hrs on the University of Dar es Salaam main campus, I saw a single L. picturatus gorging itself on small winged termites attracted to an exterior lamp on a building after a short period of rain. This and similar subsequent observations indicate flexibility in the behaviour of this normally diurnal species and its ability to utilize an abundant but sporadic food resource by extending the normal feeding period.

The Green Day Gecko is a large (s-v about 65 mm, t about 85 mm) bright green species found in coastal mainland Tanzania, on Zanzibar and Comoro Islands, and in northwest Madagascar. The genus Phelsuma was reviewed by Loveridge (1942) and a popular account by Bartlett (1964) illustrates several species in colour. In captivity these geckos eat jam (Kestle, 1964; Demeter, 1976; pers. obs.) and Drosophila larvae (Pers. obs.) They are exported from some countries for sale in the pet trade (Honegger, 1974).

Loveridge (1942) found the Green Day Gecko in the crowns of coconut palm trees in coastal Tanzania. I have collected reptiles in Dar es Salaam since 1968 but have only observed this species relatively recently. On 30th June 1974 in Buguruni, a suberb of Dar es Salaam, two were seen at 11.00 hrs on the eves of a house, where they have since been regularly observed. On 25th February 1975, a hatchling was found struggling to walk on very hot sand along the edge of Pugu road, near but not under coconut trees. The species has also been observed in trees in a garden at the New Africa Hotel (P. & S. Turner), and has been collected inside buildings at the Muhimbili Medical Centre (P. Turner) and at the Kunduchi Beach Hotel (H. & A. Stirling). These large diurnal geckos are very conspicuous and it is unlikely that their presence in houses and other buildings would have been overlooked. As further urbanization takes place in the Dar es Salaam area it will be of interest to see if the Green Day Gecko can successfully occupy buildings in large numbers and whether there will be any signs of competition between it and the Common House Gecko which is already present in many buildings and which may also be active at least during some of the daylight hours.

Voucher specimens of L. picturatus (BMNH 1976.2291) and P. dubia (BMNH 1977.435) have been deposited in the British Museum (Natural History) where Mr A.F. Stimson kindly confirmed the identifications.

REFERENCES

Bartlett, D. 1964 The Day Gecko, a little studied Lizard. Animals 3: 218-221.

Demeter, B.J. 1976 Observations on the care, breeding and behaviour of the Giant Day Gecko Phelsuma madagascariensis at the National Zoological Park, Washington. International Zoo Yearbook 16: 130-133.

Greer, A.E. 1976 The Ecology and Behaviour of two sympatric Lygodactylus Lizards. Brevoria 168: 19pp.

Honegger, R.E. 1974 The Reptile Trade. International Zoo Yearbook 14: 47-52.

Howell, K.M. & Mng'ong'o, G. 1978 *Lygodactylus picturatus* feeding on *Trigona* sp. honey. EANHS Bulletin Nov./Dec. 133-134.

Kastle, W. 1964 Verhaltensstudien an Taggeckonen der Gattungen *Lygodactylus* und *Phelsuma*. Zeitschrift fur Tierpsychologie 21: 486-507.

Loveridge, A. 1942 Revision of the Afro-Oriental Geckos of the Genus *Phelsuma*. Bulletin of the Museum of Comparative Zoology 89: 437-482, figs 1-2, map.

" " 1947 Revision of the African Lizards of the family Gekkonidae. Bulletin of the Museum of Comparative Zoology 98: 1-469, pls i-viii.

" " 1957 Check list of the Reptiles and Amphibians of East Africa (Uganda; Kenya; Tanganyika; Zanzibar). Bulletin of the Museum of Comparative Zoology 117: 153-362 + xxxvi.

Underwood, G. 1954 On the classification and evolution of geckos. Proceedings of the Zoological Society of London 124: 469-492.

Walls, G. 1942 The Vertebrate Eye and its Adaptive Radiation. Hefner, New York.

K.M. Howell, Dept. of Zoology, University of Dar es Salaam,
P.O. Box 35064, DAR ES SALAAM, Tanzania

INTERACTIONS BETWEEN PATAS MONKEYS AND THREE SPECIES OF RAPTORIAL BIRDS

While studying Patas monkeys, *Erythrocebus patas*, in the Laikipia District of Kenya during the past twenty months, we have observed four interesting interactions involving the Patas and large birds of prey.

The regions in Laikipia where Patas occur are characterized by woodlands of whistling-thorn acacia, *Acacia drepanolobium*, and grasslands dominated by Red Oat Grass, *Themeda triandra* at altitudes of 1750 - 2000 m. In one such area of approximately 250 sq. km where we have studied the Patas most intensively, we have recorded the presence of twenty six species of raptorial birds (including migrant and resident species). We have observed the Patas to interact directly with three of the large raptors present: namely, the Tawny Eagle, *Aquila rapax*, the Steppe Eagle, *A. nipalensis* and Verreaux's Eagle Owl, *Bubo lacteus*.

Two interactions began when a large raptor landed in an acacia tree already occupied by an immature Patas. One instance involved an adult Tawny Eagle and the other an adult Verreaux's Eagle Owl. In each case, an adult female Patas responded immediately by running towards the tree in which the raptor had perched with the young Patas. In both cases, as the adult female approached, the raptor flew off at a height of less than 10 m, whereupon the female Patas 'persued' it by running on the ground below it. In one of these instances, the pursuing female gave a repeated geckering vocalization typically given by Patas during alarm situations. (This vocalization is frequently heard, for example, when Patas encounter jackals.) In both cases described, it was quite clear that the raptor initially was attempting only to perch in the tree and not to prey on the young Patas.

The subsequent response by a group of immature Patas to the encounter with the Tawny Eagle was unexpected. After being chased, the bird perched again in an unoccupied tree still within the perimiter of the Patas group. Six young Patas ran directly to the tree and climbed up into it. They approached to within 50 cm of the eagle and lunged and struck at it repeatedly until the bird flew away.

The two other interactions between the Patas and large raptors we have observed both involved immature Steppe Eagles. In both of these instances, young Patas monkeys approached an eagle by climbing up into a tree in which it was perched. In one case, two immature Patas approached to within 1.5 m of a Steppe Eagle which had been perched in clear view of them for more than fifteen minutes. Upon the approach of the Patas, the eagle flew off to a distance of more than 150 m from the group. On another occasion, a Steppe Eagle perched in a tree within 3 m of an adult male Patas which was feeding. The eagle was approached by three immatures which climbed to within 50 cm of the eagle, lunged at it and tried to hit it. The eagle responded by partially spreading its wings and flapping them at the monkeys while simultaneously gaping at them. After several such exchanges between Patas and eagle, the bird flew away and perched more than 100 m from the group. The adult male Patas completely ignored the interaction even though it occured very close to him.

The response of the adult female Patas to the Tawny Eagle and Verreaux's Eagle Owl - approach, persuit, gecker - typifies the behaviour adult Patas usually direct towards any animal which poses a threat to immatures. Such behaviours, however, are occasionally directed towards animals which pose no real threat - such as impala or steinbok - when these animals approach too close to a young Patas or isolate it from the main body of the group. Thus, the Patas females' pursuit of these two raptors is not necessarily a direct indication that either species preys on young Patas even though the latter fall well within the size range of potential prey for both raptors (i.e. weighing less than 5 kg).

The response of the Patas immatures to the large raptors is analogous, we think, to the mobbing behaviour that other birds frequently direct towards birds of prey. Such behaviour, whether performed by birds or monkeys, serves the purpose of harassing the raptor, disrupting its behaviour, and causing it to move away. Among birds, mobbing is usually performed by adult birds in order to protect eggs or nestlings. It is interesting to note that among Patas, it is the potentially vulnerable immatures which themselves perform the mobbing behaviour as a group.

Dana K. Olson & Janice Chism, P.O. Box 24, RUMURUTI, Kenya

BIRDS OF KENYA: A REVIEW OF USEFUL IDENTIFICATION BOOKS

Judging from numerous questions on EANHS Wednesday bird-walks, as well as queries from the more solitary afficionados of the art, there seems to be uncertainty about which of the numerous available bird books are the more useful for identifying species in Kenya. Thus it seems useful to briefly review the literature available, looking for the books that will actually help in finding and identifying birds. These views are obviously personal biases, but are derived from very frequent use of various guides in many countries over the last 14 years; you may violently disagree, but the ideas may still be useful.

With regard to books actually for use in the field, the market has really and rather tragically been cornered by the roughly pocket-sized John Williams guides: A Field Guide to the Birds of East and Central Africa (1963), A Field Guide to the National Parks of East Africa (1967) and, with Norman Arlott A Field Guide to the Birds of East Africa (1980), all published by Collins. The 1967 volume included the so-called 'rarer' birds, many of which are not rare at all, and a good section of mammal illustrations, and is thus a useful book; but I believe that both the 1963 and 1967 are out of print, the former at least being replaced by the 1980 guide.

I have met exceedingly few people experienced in Kenyan birds who consider these to be good field guides but they are all that is available at the moment (although at least one other guide is scheduled for the near future). Valid criticism commonly levelled at them include :- (a) omission of many of the obvious fieldmarks so essential for distinguishing between the myriad of similar species here; (b) relegation of many quite common species to inadequate descriptions under the "Allied Species" heading; (c) presentation, presumably for economy, of many of the more subtley coloured birds in (1963) and (1967) in black and white, where they merge to a mystifying uniformity, defying any observer to flick through them in the hope of getting a likeness to a completely unknown bird.

While Williams and Arlott (1980) do use rather lurid colours for all their illustrations, they fail to illustrate a single Palaearctic migrant, 900 million individuals of which, as the 'Know Kenya' course frequently quotes, come to Africa from Europe for each northern winter. So that, from October to April, many of the more common birds around here just aren't shown, being mentioned under the obscurity of "Allied Species" e.g. the Eurasian Swallow (by far the most numerous Swallow in East Africa in the winter), the Eurasian Bee-eater (colourful and prominent), and the Eurasian Roller (as the Bee-eater, only perching in full view and thus more prominent). And I love the bit on page 86, where 21 of the more difficult Eurasian waders that migrate to here are summarised as "well-known species", followed solely by their latin and colloqüial names. Well-known to whom ?? This is fine if you've previously been an adequate birdwatcher in Europe but, if not, this is inexcusable disaster.

So in this respect the publishers Collins have a lot to answer for but, to be fair, they do provide a reasonable solution by also publishing The Birds of Britain and Europe with North Africa and the Middle East (1974 or later editions; authors Heinzel, Fitter and Parslow), which is excellent. The illustrations, all in colour, are orders of magnitude better and more lifelike, and are very conveniently situated on the same double-page spread as the text and map info. The descriptive text can be a little sparse at times, certainly less comprehensive than Collins' other standard European guide A Field Guide to the Birds of Britain and Europe (Peterson, Mountfort and Hollom, 1974).

Peterson could be used to supplement Heinzel in Kenya, but if one book is chosen, I think it has to be Heinzel because of the better illustrations and the larger number of species covered. Unfortunately Peterson is on sale here while Heinzel isn't, but it can always be ordered from U.K.

These European books really are useful in Kenya, particularly when Williams and Arlott show no European migrants. These books will especially help with numerous and difficult groups like the waders, terns and birds of prey - I would say a combination of Williams and Arlott and Heinzel et al is the best currently available in the fieldguides here.

In addition to these actual field guides, there are a selection of other books that, although not field guides as such, certainly carry a good deal of useful information for the interested birdwatcher. A good idea is to take useful points, e.g. bird fieldmarks etc from these books and enter them in Williams and/or Heinzel, thus having maximum useful information at once directly available in the field.

I'm a great believer in carrying field guides along in the field. This can lead to nasty habits, like the imagining of features that the open guide says should be there, but it also sometimes enables you to find fieldmarks that differentiate two similar species while the bird is still in view and able to be checked. In this respect of course, the two large volumes of Mackworth-Praed and Grant African Handbook of Birds: Eastern and Northeastern Africa: publ. Longman, reprinted 1980, are somewhat strenuous unless you're staying around your car, but they are nonetheless excellent, providing a wealth of useful detail and illustrations. And this is the only work that deals in depth with the Cisticolas and Greenbuls, both very difficult groups, and which covers all the races of local birds. This last point may seem a little academic, but some races of species within Kenya are sufficiently unlike their local, i.e. Nairobi, counterparts to cause confusion. Now that I have the books I just don't know how I did without them. Some of the illustrations in the 1980 reprint are a little inferior to those in the original and now collectors-piece editions but are still completely adequate: a must for anyone really interested.

A draw back of Praed and Grant is the outdated taxonomic classification, which classes many forms currently thought to be races as species, and a few vice versa. However, to momentarily deviate completely from field books, the answer to this is given by Birds of East Africa (Ed. Britton, 1980; publ EANHS) which contains not only very organised and modern taxonomy but also cross-references to Praed and Grant, thus making it very easy to find your way around the avifauna. This book details distribution and status of birds in East Africa and is very useful for looking up birds that you may encounter in a new area and for judging the rarity of any sighting you've made. A combination of this and Praed and Grant in your bookcase is almost encyclopaedic, combining all the earlier basic descriptive text with the latest on just where that detail applies. Again, a must for anyone interested.

Getting away from the intricacies of the Cisticolas and the Greenbuls, which are often difficult to see and hard to identify all at once, one group of birds that commonly appear in full view yet still defy identification are the raptors, the birds of prey. Many of the Afrotropical species are in fact quite starkly patterned etc, but the real difficulties arise with the large homogeneous eagles of the genus Aquila, of which 7 species occur in Kenya, and with the dashing and confusing falcons. One of the great difficulties here is that many of these birds show very variable plumage colours or phases, e.g. in the Aquilas and falcons, and most of all the Buzzards. No general bird book of reasonable weight can possibly treat all these variations adequately, so that the sections in Williams, Heinzel etc are all compromises. But one book that does deal with the European species in detail, and which I have found most useful here, is Flight Identification of European Raptors by Porter, Willis, Christensen and Nielsen (Publ. T. and A.D. Poyser, 1976). This gives several drawings of dorsal and ventral flight views of each species, together with plumage phases and some photographs, and a mass of useful descriptive detail; an excellent book. Again, I don't think its on sale here, so order from U.K.

There are unfortunately no other relevant books dealing with specific bird groups, but a good source of information on such problems are occasionally identification articles in the journal Scopus, which is published by the Ornithological Sub-Committee of the EANHS (Shs 75/- per annum; details from Don Turner, P.O. Box 48019, Nairobi). Aquila eagles (in part), Honeyguides, Greenbuls and East African endemic species have already been covered, and papers on further groups are on their way. I strongly recommend this journal to anyone wanting a fuller knowledge of East African birds. Far from being dry science, it contains some very readable and informative stuff.

Two other books on African birds are useful in that they provide further text and illustrations on many birds dealt with in the East African guides, as well as giving fuller details on some birds that occur here but which are mainly peripheral. A Field Guide to the Birds of West Africa by Serle, Morel and Hartwig (Publ. Collins (who else ?) 1977) is again plagued by mournful black and white plates but also has some reasonable colour ones, and is particularly useful for species that just reach our western borders. The Birds of South Africa by Roberts (revised edition by McLachland and Liversidge) is a little too big for a field book, and contains a very mixed bag of illustrations, the older ones being period pieces, while the newer ones, including some useful flight views of birds of prey and some good waders, are much better. This is the only book to give colour flight views of all the raptors, even showing a few of the possible plumage phases. This and to a lesser extent Searle et al use bird names differing from those currently used here, but this is not a major problem.

The titles considered so far have been primarily for the identification of birds once you have found them, but two final volumes can be mentioned as 'bird-finders', i.e. books telling you where to see birds in Kenya. The older of these is the Williams 1967 already mentioned, which contains lists of birds, along with a few very brief notes, for all of the major national parks in East Africa. These lists are reasonable in a very broad sense, but seldom provide useful detail, and often mention species that are extremely rare or are never encountered (in my experience), and vice versa.

Much more useful than this is a forthcoming guide by Ray Moore, entitled something like "Where to watch birds in Kenya", and giving good solid accounts of the country's best birdwatching sites, down to detailed maps, directions etc. I don't know the publisher, but the book is due out soon and will be invaluable, particularly to the newcomer here; the Society hopes to have copies for sale.

To summarise: the absolute minimum of guides for the birdwatcher in Kenya comprise Williams and Arlott, and Heinzel *et al*. For those who want to see and identify more birds and find out more about them :- Praed and Grant, *Birds of East Africa*, Moore. For details of difficult bird groups :- Porter *et al* and *Scopus*. As very useful extras if you have the cash :- Roberts; Serle *et al*; Peterson *et al*; Williams 1967 if you can find it.

Adrian D. Lewis, Geology Dept., P.O. Box 30197, NAIROBI

BOOK REVIEWS

Birds of East Africa Britton, P.L. (ed.) 1980. Nairobi:EANHS xiv + 271 pages, 5 colour plates, 8 black and white plates, 4 maps.

This book is subtitled "their habitat, status and distribution" and this well describes the scope of this thorough and most welcome publication. Ten of East Africa's most active ornithologists (under the guidance of Peter Britton) have collaborated closely, and as a result of their individual expertise and interests, this is an extremely authoritative work.

The introductory pages consider the topography, climate and vegetation of Kenya, Tanzania and Uganda - complicated topics that are well explained and accompanied by 8 useful black and white plates of habitats. The main text consists of species accounts, ranging from a single line to a third of a page, which are generally very successful. They deal with "habitat, status and distribution" of each subspecies where more than one occurs. The authors have sensibly followed the advise of Mr C.W. Benson in deciding which subspecies to recognise, but a complete review of all subspecies in the area cannot have been possible. Consequently, I think in some species too much attention is paid to subspecific distribution (see for example the account of the Grey-backed Cameroptera, *Cameroptera brachyura*) - given that there remains so much disagreement among taxonomists on subspecific limits, and that this topic rarely has much relevence to the field ornithologist who will most use this book. The accounts for migrants don't always include first and last dates: while these are clearly less important than the timing of main passage, they are of interest (and are detailed annually in the East African Bird Report in Scopus).

Species accounts include no summary of the breeding data published by the late Leslie Brown and Peter Britton (see the review of their Breeding Seasons of East African Birds in this Bulletin 1980: 83). In using Birds of East Africa during the past few months without a copy of Brown and Britton's work to hand, I have found this exclusion a decided drawback. For example, does the Spotted Ground Thrush Turdus fischeri breed during its stay in coastal Kenya and Tanzania (and do its movements have any connection with those of the same subspecies in southern Africa ?). A summary of breeding would have been invaluable for those species in which there is clear seasonality, not obscured by geographical variation.

Because of the varied topography of East Africa, it is useful to have altitudinal distribution detailed for each species. There is a very useful gazetteer of 7½ pages and maps of some localities mentioned in the text, although a more detailed one needs to be to hand for some distribution patterns to be appreciated fully.

Knowing that this book is the work of ten ornithologists with considerable local experience, one hesitates to criticise a point which they surely debated at length. But using this book I have repeatedly felt the need to know the authority for some statements of distribution. Given that the authors have reviewed all the literature, some coded list of key references to support the more interesting expansions of known range would have been invaluable. This is especially important given the great many specimens and visual observations from East Africa in the past which have never been published, but some of which have presumably been available to the present authors. As it is, they seem to have covered the literature thoroughly, although I have noted a couple of anomalies. No mention is made of the occurrence of the Northern White-tailed Bush Lark, Mirafra albicauda in Tsavo West, although my wife and I have published a report of it there, and the presence of the Boran Cisticola Cisticola bodessa on the Timau/Isiolo escarpment is mentioned, but not the interesting fact that it is there sympatric with the Rattling Cisticola C. chiniana, with which it was long confused. But apart from the lack of substantiating references, one can have confidence that the species accounts take into consideration all available data.

The book ends with very efficient indices of English, generic and specific names (and there is an introductory index to families and subfamilies). The alphabetical order followed in the species accounts is therefore not necessary to find one's way around. Indeed, it is positively confusing at times, as it operates within subfamilies and not families as a whole. The sunbirds occupy 8 pages of text, and finding the one you want is confusing when an unfamiliar name has been used (for example Nectarinia stuhlmanni for N. afra and N. ludovicensis for N. chalybea), although the index is useful in including some synonyms. Where a work of this kind includes a complete index, I can see no advantage in an alphabetical order in the systematic list, and would prefer to see related species together despite our knowledge of relationships being far from final.

Names indeed are likely to be the topic on which this book fuels controversy (a pity, as they are one of the least important). I know from experience that some people would expect a book entitled Birds of East Africa to be a field guide, but I fail to see the logic in this, and the format of the present work should preclude anyone buying it under such a misapprehension. English names usually follow Mackworth Praed and Grant, and the authors have rightly explained the importance of using established names where feasible (although I regret that the names used do differ to some extent from those used in the companion Breeding Seasons of East African Birds). Of importance to users of the work in the field is the treatment of closely-related forms, which are "lumped" and which "split" into individual species. Here the authors are usually consistent, guided by their own field experience (e.g. the two Marsh Harriers Circus aeruginosus and C. ranivorus are recognised as distinct species). The introductions to families usually explains which authorities are followed. But they continue to lump Cisticola nigriloris with chubbi, in spite of good contrary evidence published by Chappuis in 1974, while they do follow Clancey and Irwin's treatment of the double-collared sunbirds (mentioned above) which has not been tested in the field.

The five colour plates are welcome extras, and one must be greatful to the sponsors for making them possible (though it would have been nice for more East African endemics to be depicted). But knowing the very great ability and high standards of the artist Rena Fennessy, the reproduction of the plates must cause some disappointment, the colours being poorly registered.

The book is well produced, though some pages were loose in the review copy. Typographical errors are few, and all seem to have been picked up by the authors themselves and corrected at the beginning of the book.

The foreword by Professor Kai Curry-Lindahl includes such terms as "much needed" and "long overdue", which will be echoed by all who use the book. At last East Africa takes its rightful place as not just one of the most important and best known parts of Africa ornithologically, but now one of the best documented. One hopes that this book, Breeding Seasons of East African Birds and the invaluable journal Scopus will be the incentives for much further research in East Africa, and if this aim is achieved, then full credit will be due to Peter Britton and his colleagues and to the EANHS for taking the initiative in implementing such an important series of publications.

R.J. Dowsett

(STOP PRESS REQUEST FOR INFORMATION The Grey-crested Helmet Shrike, Prionops poliolopha. Dr A.D. Lewis, Geology, P.O. Box 31097 Nairobi will welcome and acknowledge any records of this rare species, for use in a summary of its status. Ed.)

Snakes of Rhodesia D.G. Broadley and E.V. Cock. Bundu Series, Longman, Rhodesia.

When I was asked if this excellent little book would be any use in Kenya, I flipped through the illustrations (which are colour photographs of high standard) and seeing so many familiar Kenyan snakes replied in the affirmative. I have had a second think, however, and find the differences between the snake faunas of Zimbabwe and Kenya to be rather overwhelming. Of the 17 species of viper in Kenya (I include the mole 'vipers') only 5 appear in this book. The genera Atheris (tree vipers), Echis (carpet vipers) and Vipera are absent, and among absent species is the large (and dangerous) Bitis nasicornis which is such a conspicuous member of the herpetofauna of many parts of western Kenya. Less startling figures emerge in comparing elapids and colubrids, but there are plenty of important species missing. Out of a total of 64 colour plates, however, no less than 41 are of snakes occuring in Kenya.

I should mention that Donald Broadley is one of Africa's leading herpetologists, so that the chapters on anatomy, behaviour, venoms, snake-bite etc, are very informative and, and this is unusual among snake books, authoritative. I shall be buying a copy.

Alex MacKay

Butterflies of Rhodesia Richard Cooper. Bundu Series, Longman, Rhodesia.

This little guide in the Bundu series is a comprehensive cross section of the butterflies of the country. A large proportion of them are also found in Kenya (about 80%) and so it is a useful book to have. Though some of the plates have over-exagerated colours (cf. pl. ix, where Charaxes candiope should be almost yellow in colour) most of the species can be readily identified.

One factor which is helpful is the inclusion of a good number of the more difficult groups like the Blues and Coppers (Lycaenidae) and the Skippers (Hesperiidae), both of which are practically ignored by Williams in his Field Guide to the Butterflies of Africa which is the only other book covering the same area.

Mike Clifton

Some Well Known African Moths Elliot Pinhey. Bundu Series, Longman, Rhodesia.

As Mr Pinhey has taken the more common moths for this volume most of them occur in Kenya. Of course, there are a great many more moth species than there are butterflies and so a proper coverage is impossible. He has chosen those that are normally seen either around security lights or in the house. In the larger groups he wisely confines himself to a few representatives which are not always the ones found here. As there is nothing else available in this part of the world covering such a comprehensive range of families and species of moths it is well worth obtaining a copy.

Mike Clifton

EANHS FIELD TRIP NEAR NGONG HILLS

On a dull Sunday morning, 29th March, the Society held a day trip in the Ngong Hills area led by Priscilla Allen. Two days earlier it had poured with rain, soaking the earth and presenting a wet walk in our search for birds. The possibility of rain may have deterred some members for only a dozen or so people assembled outside the Museum at 8.45 a.m. and at 9 o'clock just four cars moved away in warm sunshine towards the Ngongs. By then my first entomological encounter of the morning had already taken place - when one member of the party seized upon a Nairobi eye (*Opticus nairobi* ?!) on the floor of our car, identified it and subsequently disposed of it !

Our first stop along the route was on a hill at the south end of the Ngongs, where we got out of our cars to appreciate the view south-westwards along and across the Rift. With Adrian Lewis' help we were able to distinguish even the faint outline of the Crater Highlands in Tanzania and pick out the mountains in between, some seen through fascinating vertical columns of cloud.

We also had excellent views of the singing male Pectoral-patch Cisticola, *Cisticola brunnescens*, in aerial cruise flight above the spread of the land and of other birds typical of that area: Rufous-naped Lark, *Mirafra africana*, Augur Buzzard, *Buteo augur*, Black Kite, *Milvus migrans*, Richard's Pipit, *Anthus novaeseelandiae*, Stonechat, *Saxicola torquata* and Rattling Cisticola, *Cisticola chiniana*.

We proceeded along the road, dipping down and turning off on a rocky track about 45 km from Nairobi. A short stop to reconnoitre and be greeted by Masai, appearing as usual from nowhere, and then on again until we reached the dry river bed of a stream which Priscilla Allen informed us had been filled with water four days earlier. Here we parked our cars and had moved mearly 20 metres away into the bush when we spotted three snakes in a tree ahead. Two of them who, we assumed, were mating, were intertwined along a limb of the tree and the third, red-headed and intent, was nearby watching them. We were able to watch them for twenty minutes or more and some members approached to within a few metres to photograph them. They ignored us completely, so absorbed were they in their own affairs. Indeed they were still in the same place when we returned an hour later. Perhaps those who took photographs will be able to help to identify them.

Leaving the snakes we resumed our search for birds. As usual, the apparently empty bush was filled with birds and Adrian Lewis and Yvonne Malcolm-Coe helped us greatly in spotting and identifying 44 species. It was also good to have Dr Jo Darlington with us to point out some of the many species of termites.

Wending our way back to our picnic lunch (which we consumed as soon as we could shade from the hot sun) we glimpsed two Dwarf Mongoose, *Helogale undulata*, disappearing into a termite mound. And so at three o'clock, after a thoroughly memorable and enjoyable day, we returned to Nairobi and to heavy rain !

Mr D.F. Kent, K.I.A., P.O. LOWER KABETE, Nairobi

MEMBERS ADVERTISMENTS

Staying at Naivasha ? Roger Mennell at Korongo Farm, P.O. Box 28, Naivasha, phone Naivasha 56Y10 has the following available: a lovely camp site, charge Shs 10/- per adult per night (children under 12 half-price). Bring your own tents, sleeping bags and food - drinking water, toilets, electric light, kuni for a camp fire and cooking and washing-up shelters are provided. Also available is one self-help banda equipt with 4 beds and fully furnished including cooking equipment, fridge, cooker, hot water and electric light. Anyone using this has only to bring their food and sheets. Charge: Shs 100/- per day regardless of how many people are using it. Please contact Mr Mennell direct for bookings.

Camera Equipment for Sale: Two Nikkormat FtN Camera bodies Lenses(all genuine Nikon) 300mm f 4.5, 135mm f 3.5, 55mm f 3.5 (macro), 50mm f 2, 35mm f 2.8. Accessories: Miscellaneous filters, extension tubes etc. All in a solid leather camera case - MAY BE VIEWED AT EXPO CAMERA, MAMA NGINA STREET. This equipment is in first class condition and was the property of the late Dr Leslie Brown. In addition we have some electric print driers.

Plywood boat for Sale: Collapsible plywood boat, two man, easily fits into the boot of a car - need minor attention - ideal for bird watching, photography, fishing on dams etc. Please contact Mrs Brown, phone Karen 2225, P.O. Box 24916, NBI.

EXTRA-ORDINARY GENERAL MEETING

An Extra-Ordinary General Meeting of the East Africa Natural History Society will be held on Monday 8th June 1981 at 5.30 p.m. in the Museum Hall, Nairobi, before the lecture. The extra-ordinary general meeting due to have been held on 13th April 1981 had to be cancelled as our Hon. Auditor had not completed the accounts due to pressure of work at the beginning of the year.

AGENDA

To approve the accounts for the year 1980, with the Hon. Treasurer's Report.

SOCIETY NOTES

Birds of East Africa edited by Peter Britton and reviewed on page 50 of this Bulletin is available from the Society's office in the National Museum : Price Shs 130/-.

Checklist of the Birds of Kenya by the Ornithological Sub-Committee is also available from the office: Shs 10/- to members who call to collect their copies, by surface mail in East Africa Shs 12/-, by air mail in East Africa Shs 15/-.

Field Guide to the Birds of East Africa by John Williams and Norman Arlott. Our stocks are now depleted and we are awaiting the main delivery which is on the high seas. They are due in at the end of May so by early to middle June we should have supplies. Price: Shs 160/- to members but this may have to be altered depending on the wholesale price. Postal orders will be accepted but please include Shs 10/- extra for postage and packing.

Breeding Seasons of East African Birds by the late Leslie Brown and Peter Britton is still available to members at Shs 80/-.

The Aloes of Tropical Africa and Madagascar by G.W. Reynolds. A few copies are still remaining at Shs 240/- to members - a must for any interested naturalist.

Car Stickers are in stock at Shs 2/- each - help to advertise the Society.

Informal Notes: 6 attractive designs, sold in packs of 12 with envelopes for only Shs 10/- a set - and they are air mail weight.

Bulletin Copy Our thanks to those who submitted copy for this issue but more is always required so please write in to The Editor, P.O. Box 44486, Nairobi with your notes and observations.

Joint Library Members are reminded that we have an excellent Africana library which is housed in the National Museum. Full members may borrow non-reference books, junior members are allowed to read in the Library but not to borrow books. Please have your current membership card on you as the Librarian will ask to see it. The Library is open at the following times:

Monday to Friday 8.30 a.m. to 12.30 p.m.
2.00 p.m. to 4.30 p.m.
Saturday 8.30 a.m. to 12.00 noon

NEW MEMBERS

The following new members have been elected to the Society:

Local Full Members

Mr and Mrs C.J. Braun, P.O. Box 47197, NAIROBI
Dr Janice Chism, ADC Mutara Ranch, P.O. Box 24, RUMURUTI, Kenya
Dr and Mrs J.I.M. Davy, Dept. of Languages, K.U.C., P.O. Box 43844, NAIROBI
Jean L. Edwards, P.O. Box 30577, NAIROBI
Mrs Betty Fulton, P.O. Box 36, KILIFI, Kenya
Mr B. Goddeeris, ILRAD, P.O. Box 30709, NAIROBI
Mrs L. Anne Holmes, Oaklands Estate, P.O. Box 17, RUIRU, Kenya
J. Chr. Leeuwenburg, Medical Research Centre, P.O. Box 20752, NAIROBI
Richard Markham, C.I.B.C., c/o K.A.R.I., P.O. Box 30148, NAIROBI
Miss Dana Olson, ADC Mutara Ranch, P.O. Box 24, RUMURUTI, Kenya
Miss Sally Owen, P.O. Box 40612, NAIROBI
Mr Hemant Patel, P.O. Box 48834, NAIROBI
Miss Pamela Scott, Deloraine, P.O. RONGAI, Kenya
Mr and Mrs D.L. Stephenson, P.O. Box 18195, NAIROBI
Mrs B.M. Tanner-Tremaine, P.O. Box 52, NANYUKI, Kenya
Mr Joel Ticknor, P.O. Box 30137, NAIROBI
Major R.F. Tyers, P.O. Box 79, NAIVASHA, Kenya
Mr Enock O. Wakwabi, Kenya Marine and Fisheries Research Institute, P.O. Box 81651, MOMBASA, Kenya

Local Junior Members

Master Russell Elson, P.O. Box 56607, NAIROBI
J.K. Kimani, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
George Owiti, P.O. Box 59078, NAIROBI
W.E. Wambugu, Elgon House, Nairobi School, P.O. Box 30047, NAIROBI

Local Life Member

Mr and Mrs I.G.P. Grant, El Karama Ranch, P.O. Box 172, NANYUKI, Kenya

Overseas Full Members

Francine M.R. Hughes, Dept. of Geography, Downing Place, CAMBRIDGE, England CB2 3EN
Allan Johnston, Development Alternative, Inc., P.O. Box 7296, ARUSHA, Tanzania

Overseas Junior Members

Fiona M. Sinclair, Roedean School, Brighton, Sussex, U.K.
Ian R. Sinclair, Loretto School, Musselburgh, East Lothian, SCOTLAND

Change of Status to Life Membership

Mr Deryck H. Day, P.O. Box 84367, Greenside 2034, JOHANNESBURG, South Africa
Prof. Dr Med. H.M. Seitz, Direktor des Instituts fur Med Parasitologie, Der Universitat Bonn, D-5300. BONN 1, den Sigmund Freud Str 25, Fed. Rep. Germany

(Members are reminded that an application form was enclosed with the last issue of this Bulletin, please pass it on to a friend and have them join. Ed.)

SOCIETY FUNCTIONS

Monday 11th May 1981 in the Museum Hall, Nairobi at 5.30 p.m. Members Slide Show. Please bring along your best slides and be prepared to talk about them.

Sunday 17th May 1981 Day trip to see birds and other natural history subjects in the Nairobi area, kindly lead by Miss Yvonne Malcolm-Coe. Please meet at the National Museum at 8.30 a.m. and bring a picnic lunch if you wish to stay all day.

Friday 29th May to Monday 1st June 1981 Madaraka Weekend Camp to the Chyulu Hills, kindly lead by Mr Peter Johnston and our junior members from Nairobi School. Please see the March/April Bulletin for details and camp slip. Entries close on 20th May.

Monday 8th June 1981 in the Museum Hall, Nairobi at 5.30 p.m. EXTRA ORDINARY GENERAL MEETING (see page 55) followed by Prof J.O. Kokwaro, our Vice Chairman who will give an illustrated lecture on Observations on the Vegetation of Tsavo National Park from 1966 to the present.

PLEASE NOTE FUNCTIONS START ON THE PREVIOUS PAGE

Saturday 6th/Sunday 7th June 1981 Weekend trip to the Naro Moru and Mt Kenya areas by kind invitation of Naro Moru River Lodge and Mr and Mrs Fayad. The following accommodation is available at Naro Moru River Lodge :
Full Board Single Shs 235/-; Double Shs 330/-; Triple Shs 425/-
Self Service Chalets Batian, 2 beds, Shs 165/-; Lenana, 2 beds, Shs 165/-; Nelion, 5 beds (2 bedrooms) Shs 350/-; Rutundu, 6 beds (2 bedrooms) Shs 400/-; Ithanguni, 6 beds (2 bedrooms) Shs 400/-; Tereri, 6 beds (3 bedrooms) Shs 420/-; Sendeyo, 7 beds (3 bedrooms) Shs 430/-. (All rates quoted are per night). The self service chalets contain beds, matresses and pillows and cooking and dining facilities. Bedding can be rented from the Lodge at Shs 7/50 per set (2 blankets, 2 sheets, pillowcase and towel). Firewood can be bought from the store at Shs 15/- per load. Members are advised to make up their own parties for these chalets if they do not wish to share with other members. Bookings, made as soon as possible, should be direct through Mr Wazome, Naro Moru River Lodge, P.O. Box 18, NARO MORU and accompanied by payment if full, cheques payable to NARO MORU RIVER LODGE. Please state which accommodation you require. The highlight of this trip will be a Saturday afternoon walk along the Naro Moru River accompanied by Vince and Chris Fayad to study birds and botany and a Sunday walk on Mt Kenya - members will have to provide their own transport for this.

Sunday 14th June 1981 Day trip to Embakasi Ranching Co., by kind invitation of Jean and Lionel Hartley. This is a very interesting locality for birds; 190 species have so far been recorded. It is hoped that a botanist will also be in attendance. Please meet at the National Museum at 9 a.m. and bring a picnic lunch.

Monday 13th July 1981 in the Museum Hall, Nairobi at 5.30 p.m. Dr Celia Nyamweru will give another of her very popular illustrated lectures on Geology of Eastern Kenya. Copies of her new book 'Rifts and Volcanoes' will be on sale.

Monday 14th September 1981 in the Museum Hall, Nairobi at 5.30 p.m. Mr Richard Leakey, Director and Chief Executive of the National Museums of Kenya will present another popular lecture on prehistory in East Africa.

Saturday 19th September 1981 A 'dudu crawl' with a difference, but led as usual by Mike Clifton, Entomologist at the National Museum. Please meet at the National Museum at 6 p.m. and from here Mr Clifton will demonstrate, in the Museum grounds, the different techniques of catching insects at night. Members are advised to bring warm clothing.

Sunday 18th October 1981 Dr Adrian Lewis of the Geology Dept. of the University will lead an evening walk in Hell's Gate, Naivasha to study the geology and watch the birds coming in to roost. Full details later.

Saturday 14th November 1981 Mr Brian Meadows of the Society's Ornithological Sub-Committee will lead an afternoon bird walk to Dandora Sewage Works to view the migrant birds which are usually there in vast numbers. Full details later.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Mr. S.G. Njuguna, Dr. D.J. Pearson.
Co-opted Members: Mrs. H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Dr. A. Hill, Dr. F. Owino.
Journal Editorial Sub-Committee : Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas.
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, P.L. Britton, Mrs. H.A. Britton, P.B. Taylor, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee : (Society representatives) Prof. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee : Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SI
NH

EANHS

BULLETIN

SMITHSONIAN
OCT 9 1981
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN JULY/AUGUST 1981

CONTENTS

Birds of the Kaisut Desert, Northern Kenya 60
Sunbirds at Kizembe Estate, Upper Kiambu 64
Crowned Hornbills Nesting near Eldoret 65
Martial Eagle in Tsavo National Park 66
The Tree Outside my House 67
The Lotus in Chinese Cooking 68
Albino Colobus Monkey 69
Gyna colini (Dictyoptera, Perisphaeridae): First Record for Tanzania 70
Book Review - *Baboon Mothers and Infants* 72
Obituary - The Late Duke of Portland 73
Kanure Kibui 74
Easter Weekend Camp to Ngare Ndare Farm 74
Camp in Chyulu Hills 29th May - 1st June 77
Informal Sunday Outing on 17th May 78
Nest Record Scheme - Important Notice 80
Kakamega Forest Rest House 80
Society Notes 80
New Members 83
Society Functions 84

BIRDS OF THE KAISUT DESERT, NORTHERN KENYA

The Kaisut Desert is the corridor of low-lying ground that lies to the south and southwest of the great Quaternary volcanic dome of Marsabit, in northern Kenya; to the south, the Kaisut is fringed by the rising ground of the Precambrian Ndoto Mountains, and minor Quaternary lava spreads. It is part of the great belt of desert and semidesert that extends from the far northwest of Kenya, eastwards across the Lake Turkana basin to Marsabit, and then, in a thinner strip, southeastwards towards Garissa.

From 20th to 25th May, 1981, I was based at Korr (altitude 640m, $2^{o}01'N, 37^{o}30'E$), which is in the northern reaches of the Kaisut, about 55 km southwest of Marsabit town. Spending each day walking or driving over a relatively restricted area (approx. 300 km^2), I had ample opportunity to observe birds, and here relate a summ·ry of my observations.

The Kaisut in general is a poorly documented area for birds, most birdwatchers only making observations along the main A2 road as they head for Marsabit and the rather more exotic birds of the black lava Dida Galgalla desert to the north. The only birdwatchers to see the Korr area are probably those who take the Turkana bus, which regularly stops in the village on its way south.

Thus it seems useful to summarise my sightings, particularly as, in this rather barren environment, I saw only 54 species, probably a record low for a Kenya birdwatcher's week !

The area is a peneplain on the Precambrian Basement metamorphic rocks, with a few low inselbergs and the occasional largish wadi. In the east, I just reached the southwest limit of the Pleistocene lava flows from Marsabit. The area had received heavy rain about six weeks before, and was uncharacteristically green, though becoming appreciably browner during the short period that I was there. This brief period of lushness after the long rains produces the single regular breeding season for the birds in this otherwise arid area, so that my notes contain many nesting and other observations, many more than would be recorded in the drier parts of the year. Though it was often overcast to the west and south, and occasionally over the higher ground of Marsabit, the Kaisut was usually cloudless and hot; a strong easterly wind blew for most of my stay.

The birds are probably best described under their various habitats, though of course many occured in more than one environment. Latin names are omitted for brevity, but english names precisely follow Britton (1980).

1) Playas

Local eastwards drainage has apparently been dammed by the Marsabit lava flows to form playa lakes, which only contain surface water during the rainy season, after which they quickly dry up to leave water relatively inaccessible below ground.

Due to the prolonged presence of this subsurface water, even the dry playa areas support a characteristic and fairly dense vegetation of long grass and Acacia seyal that completely belies the barreness of the surrounding arid flats. Species only noted in this habitat were Didric Cuckoo (heard), Nubian Woodpecker, Hunter's Sunbird (only seen around flowering wadi trees), Variable Sunbird (singing male of the white-bellied race albiventris), Red-billed Buffalo Weaver (carrying food to nestlings) and Donaldson-Smith's Sparrow Weaver (building nests).

One small area of this habitat was still flooded, to a depth of 30 cm or so, and this held a pair of Spurwing Plovers, and a single Cattle Egret. In the hot hours of the late morning, over 100 each of Namaqua and Laughing Doves were drinking at the water's edge, with flocks of 20 or so continually coming in from the surrounding country; other drinking birds included a Mourning Dove, a Brown-necked Raven, and 10 Wattled Starlings in full breeding plumage. This concentration of birds seemed likely to attract raptors, but none were seen.

2) Open Desert Flats

These flats consist of stone pavements and sand, with dunes up to 50 cm high. The ground was either bare, or sparsely covered in short yellowing grass and/or low shrubs. Here birds were numerous, though often well camouflaged. The commonest species was the Chestnut-headed Sparrow Lark, with flocks of up to 20 in the air at once, and literally hundreds seen during a day's walk; several were seen carrying food to nestlings. Crested Larks were also common but in much smaller numbers, and more often in loose rock-rubbly locations. They were also carrying food, and a male displayed to a female by simultaneously singing, erecting his crest, drooping his shivering wings to the ground, and cocking his tail over his back to expose the prominent whitish vent and under tail coverts.

Crowned Plovers were common in flocks of up to 20 and even 30, and were often heard at night. A pair performed intense distraction displays when we presumably approached a nest or chick, while a predated egg was found elsewhere. Cream-coloured Coursers were also common but in flocks of 10 or less, usually on the less rocky flats. The only Sandgrouse seen was the Chestnut-bellied which was in pairs and flocks up to 60, and often flushed from the flats; flocks were regularly seen flying east in the early morning.

Perhaps the most surprising bird of the trip was a male Northern Wheatear in full breeding plumage, which appeared in our camp at 7.15 a.m. on 23rd May. Britton (1980) mentions instances of over-summering in Kenya by this migrant from the Palaearctic, but this bird was obviously desperate to leave Africa, moving directly northwards over the ground, even in flights of only a few metres duration between hastily taken bits of food; it eventually disappeared over the hill to the north of us. This appears to be the latest date for this species on Spring migration to East Africa. A single Capped Wheatear moving east on 24th May was unusually far north (Britton, 1980) and was presumably also migrating, though in this case as an inter-Africa migrant.

Other birds in this environment were :- Ostrich (a single female seen from the aircraft midway between Korr and the Ndoto Mountains, ie not in the area investigated), Taita Fiscal (occasional pairs), and Speckled Pigeon (a single flock of 5 moving east).

3) Scrubbier Areas

Particularly to the north of Korr, there were areas of taller scrub and sometimes quite thick bush. The high, almost mournful whistle of the Buff-crested Bustard was common here, but the birds were very hard to see; once a male leapt out of the low cover in display flight, flapping up almost vertically to about 10 metres, only to immediately drop in a steep gliding descent, with the wings acutely angled above the body. Ring-necked, Laughing and particularly Namaqua Doves were common, but surprisingly only a single Blue-naped Mousebird was seen. The White-throated Bee-eaters were common singly or in flocks up to 5 over the Korr area generally, taking advantage of any prominent perch. Only three Somali Bee-eaters were seen, this species being more common to the north and east.

Raptors were scarce but, on 23rd May, a pair of White-eyed Kestrels were seen copulating, directly after fiercely mobbing a Brown-necked Raven.

Other species seen in this scrub area were :- Red-fronted Warbler.(1 pair), Pale Prinea (flock of 5), Taita Fiscal (scattered pairs), White-headed Buffalo Weaver (occuring in small numbers around trees/bushes all around the area) and Somali Golden-breasted Bunting (also carrying food).

4) Wadi Trees

The other distinctive habitat were the fairly tall *Acacia* trees along the few wider wadis. All of these water courses were now dry, with water levels in wells about 10 metres below the surface. Surface flows could still be seen from the aircraft near to the Ndotos.

Again Ring-necked and Laughing Doves were common, but this was the only habitat (except the playa lake) where I saw the Mourning Dove, which came within 100 metres of the Ring-necked, but which was never seen to actually flock with it. Occasional singles or pairs of the Yellow-billed Hornbill occured in these trees, and a single male Von der Decken's Hornbill was also seen.

A very interesting find on 24th May was a newly fledged Great Spotted Cuckoo in a nest with two young Brown-necked Ravens, about 10 metres up in one of these wadi trees. This constitutes the northernmost confirmed breeding record of this Cuckoo in Kenya, though it occurs in the Turkana area in April - July (Britton, 1980). The Pied Crow is the main corvid host of this Cuckoo in East Africa (Brown and Britton, 1980). This appears to be the first East African record of the Brown-necked Raven in such a situation (P.L. Britton, pers. comm.) though this species is known elsewhere (Mackworth-Praed and Grant, 1960).

Another surprise were a pair of Somali Sparrows feeding nestlings in a solitary tall *Acacia*, 100 metres from a largish treed wadi. This species breeds in Ethiopia and Somalia (Hall and Moreau, 1970) and this appears to be the first breeding record for East Africa (Lewis, 1981). The male is a beautiful bird, with rich chestnut cap, nape and wing coverts, and a quite distinct yellow tinge on the whitish ventral torso and sides of the face.

The localisation of birds around these wadis also attracted raptors, with singles of Pygmy Falcon and pale phase Gabar Goshawk being seen.

Other birds around these wadis were :- Red and Yellow Barbet (single sighting), Wattled Starling (colony feeding nestlings on 20th May), Golden-breasted Starling (single sighting), Superb Starlings (common in small numbers, very largely restricted to these wadi trees), Grey-headed Sparrow (2 sightings) and Yellow-spotted Petronia (carrying food).

5) Scavengers

This mixed bird group was particularly prominent in this bare environment, major sources of attraction being the rubbish from Korr village and the numerous carcases of cattle recently killed by the drought, though the latter seemed too decayed or picked clean to offer much sustenance.

The scavengers around Korr comprised several Brown-necked Ravens, the occasional Black Kite, and up to five Egyptian Vultures; these birds were occasionally seen out over the desert, but there were always some in evidence around the village.

Vultures were well represented, with all six of the 'normal' Kenya species. The strong easterly wind produced a powerful updraft over the low but steep-sided inselberg directly to the southwest of our camp, and various vultures and the occasional Brown-necked Raven utilised this lift around 7 am every day, presumably as a substitute for the thermal uplifts of the later hotter parts of the day.

These birds wandered freely and were seen in all parts of the area, often in mixed flocks, with several members of the smaller species attendant on the huge Lappet-faced Vultures. Maximum numbers noted around the area at various times during my stay probably represent the local population, though vultures do of course move over long distances when searching for food, so that the population at any one place will always be fluctuating; still, the figures are :- Lappet-faced a pair + 1 imm.; Ruppell's 1 ad; White-backed 2; White-headed 3, including 1 or 2 imms.; Hooded 6; Egyptian 8. Note the larger number of the smaller species.

6) Others

The final three species were also flying generally over the area :- Bateleur (3 sightings of solitary single birds, including an imm.); Tawny Eagle (2 different ads. and 2 imms, all flying with vultures); Alpine Swift (a group of 3 heading north on 23rd May were presumably wanderers from either Marsabit or the Ndoto-Nyiru Mountains).

7) Absences

Some species were notable in their absence, for example the Swifts (except for Alpine) and the Swallows. Likewise Cisticolas, where Rattling or Tiny might have been expected;

and the Common Bulbul. Rocky inselbergs were specifically but unsuccessfully searched for the Stone Partridge and the Brown-tailed Rock Thrush, while the more sandy environment probably militated against the specialities of the nearby Dida Galgalla black lava wastes, ie the Masked, Short-crested and Williams Bush Larks.

8) Mammals

Finally, small numbers of mammals were also encountered, largely on the temporary grassy flats to the south of Korr :- Grevy's Zebra, Equus grevyi (herd of 30, and 2 singles); Grant's Gazelle Gazella granti (group of 6); Gerenuk, Litocranius walleri (a male with 3 females); Unstriped Ground Squirrel, Xerus rutilus (several); 2 sightings of possibly different species of Hare, Lepus sp.

The local Rendille also mentioned a couple of Lions, Panthera leo, that had been killing goats in the area, just after the recent rains.

9) Acknowledgements

I am particularly indebted to my guide to the area, Mr Kennedy L.A.B. Sogomo, for his cheerful and extremely knowledgeable help. These observations were made while engaged on geological fieldwork, for which UNESCO provided air and ground transport and a base camp, all of which are gratefully acknowledged.

References

Britton, P.L. (ed.) 1980. Birds of East Africa. Nairobi: EANHS
Brown, L.H. & Britton, P.L. 1980 The Breeding Seasons of East African Birds. Nairobi: EANHS
Hall, P.B. & Moreau, R.E. 1970. An Atlas of Speciation in African Passerine Birds. London: British Museum (Nat. Hist.)
Lewis, A.D. 1981. The Somali Sparrow Passer castanopterus : a breeding record for East Africa. Scopus in press.
Mackworth-Praed, C.W. & Grant, C.H.B. 1960. African Handbook of Birds. Birds of Eastern and North Eastern Africa. 2nd ed. London: Longman Green & Co.

Adrian D. Lewis, Department of Geology,
P.O. Box 30197, NAIROBI

SUNBIRDS AT KIZEMBE ESTATE, UPPER KIAMBU

Kizembe Estate is situated at 2,133m above sea level in the tea zone. We have in the garden three Himalayan Bird-cherry trees, Prunus paddum, and these were in full flower in April 1981.

We observed seven species of Sunbird at the same time on the flowers, whereas normally we have only three species resident.

The species were Eastern Double-collared, Nectarinia mediocris; Bronzy, N. kilimensis; Tacazze, N. tacazze; Golden-wing, N. reichenowi; Green-headed, N. verticalis; Amethyst, N. amethystina and Malachite, N. famosa.

Normally we only have the Eastern Double-collared, Bronzy and occasionally the Green-headed, and so it would seem that the other species moved in to feed on the cherry blossom.

To be able to observe seven species all feeding simultaneously was quite an experience and abnormal.

Tom Grumbley, P.O. Box 200, KIAMBU, Kenya

CROWNED HORNBILLS NESTING NEAR ELDORET

Of the many birds that have nested at the University College of Eastern Africa during the 1980-81 school year, the most interesting have been the Crowned Hornbills, *Tockus alboterminatus* nesting in a silk-oak, *Grevillea robusta* by the dining hall. This tree was topped about 10 years ago and two shoots from the cut end formed parallel trunks with a crack between them and a hollow space where the end of the old trunk rotted away. The narrow opening, too narrow for an adult hand to enter, is about 8 metres above the ground.

The pair of Crowned Hornbills began visiting the tree before Christmas. By January a contest had developed between the hornbills and a pair of Blue-eared Glossy Starlings, *Lamprotornis chalybaeus*, over the use of the hole. A lot of chattering and dive-bombing followed the arrival of the hornbills each day. By 25th January the hornbills won the custody of the hole and the starlings moved to a tree between the calf barns by the intensive garden.

By 28th January it appeared that the female hornbill had entered the nesting hole and would stay there through the nesting period. How she got in and out through the narrow slit I find hard to understand. The slit was plastered with a black mixture containing seeds of berries, some of which were of mistletoe. The remaining opening was only large enough to allow the male to pass food to the female inside. The food trips of the male continued every day averaging about two hours apart. He usually brought a large grasshopper or locust. Students watched him pass the food to the female hornbill through the narrow hole.

A confusing sight came on 16th February as two Crowned Hornbills, a male and a female were seen flying across the campus towards the dining hall area. Since the nesting pair were the only Crowned Hornbills seen on the property up to that time or since, it appeared that the female left the nest for a while. During 14th - 16th March the male was observed bringing food to the nest regularly. The female could be seen moving inside the hole and taking the food from the male. The male's trips were more frequent since the egg had hatched by that time.

Very heavy rain drenched the area during the last week in March. On the night of 30th March, 29.5 mm of rain fell. The next morning the female hornbill was found hopping about on the ground under the nesting tree. She was completely soaked and her feathers were matted and bent from her confinement in the nest. Apparently the nest had filled with water during the rains of the night. The parellel trunks of the tree above the nesting hole funneled the rainwater into the slit and nesting cavity. The mud plastering had largely washed away and the mother hornbill had come out of the hole and fallen to the ground. She was unable to fly so was easily caught, cleaned and dried and put in a cage to rest in the sunshine.

The male hornbill kept bringing food to the nest to feed the one young bird inside. The baby would not eat. He was probably too cold from being wet or could have suffered from pneumonia. After several tries at persuading the young to eat, the father bird sat on a nearby branch for a while and ate the grasshopper himself. All during the day of 31st March he repeated his attempts to feed the young bird.

The young hornbill was still alive when I reached the nest in the afternoon. It was very difficult to force my hand through the small opening into the nest to get the young bird, even though there was no mud plastering left to hinder my work. The baby was a very weak little bundle of naked skin and a few dark quills on the wings and tail. It soon died though we tried to revive it with warmth and liquid food.

The mother regained her strength very quickly. She took grasshoppers from my hand and became more and more agressive as shown by the cuts her bill left on my hands. Her calls brought the male that evening and during 1st April he regularly fed her locusts and grasshoppers through the cage. In the afternoon I released her under the watchful eye of the male. The male sang a song as the two flew off together.

Unfortunately we were not equipped to ring her before she was released. The pair have been visiting the nest tree since.

By the end of April the Blue-eared Glossy Starlings had successfully raised their family and their nesting tree was empty.

Larry Siemens, Biology Department,
University College of Eastern Africa,
P.O. Box 2500, ELDORET, Kenya

(Mr Siemens has also provided the Society with a partial list of the birds found at the University College of Eastern Africa grounds. This is stored in the locality list file and members are free to borrow this and other lists. Ed.)

MARTIAL EAGLE IN TSAVO NATIONAL PARK

At about 09.30 on the 22nd March, as we were driving along a track in Tsavo West National Park, we observed a juvenile Martial Eagle, Polemaetus bellicosus, sitting on a low branch of a baobab tree. A few minutes later it was joined by an adult Martial Eagle carrying a dead spurfowl in its talons. Judging by its size we assumed this to be the female parent.

From a good vantage point we clearly saw how first she plucked the prey. When the neck, belly, rump and parts of the thighs of the spurfowl were plucked she proceeded to eat.

The most interesting detail was that the first titbit eaten was the brain of the prey. After opening the skull and scooping out the brain she then proceeded to eviscerate the prey. Only after this did she eat the muscles.

Interestingly, during this time the juvenile neither asked for nor was offered any of the meal but sat quietly preening itself. Yet the female interupted her meal at more or less regular intervals to utter soft calling sounds and to occasionally crane her neck and look up into the sky. Although we looked for some time we could not make out any other Martial Eagle, neither in the sky nor in any of the surrounding trees.

Dr Imre J.P. Loefler, P.O. Box 47964, NAIROBI

THE TREE OUTSIDE MY HOUSE

I am living at the edge of Karura Forest at Utalii Village Ruaraka, near Nairobi. Outside my house, there is a common indigenous forest tree, Pappea capensis, known by the Kikamba name as "Kivaa" or "Mubaa". This tree is in the family Sapindaceae and happens to be a useful tree in traditional African medicine as well as having a number of economic uses. Its leaves, roots, bark and saplings are used by different tribes for the treatment of chest pains, venereal diseases, sore eyes, ring worm (Tinea) and constipation. Its fruits are edible and have kernels whose contents are 73% oil; golden-yellow oil formerly used in the making of soap and lubricants.

This tree attracts many birds and insects when it flowers and even more when the fruits ripen. Of special note are the sunbirds and flycatchers that flutter all over the tree to catch the many insects in the blossoms. As the fruits mature and ripen, a host of fruit-eating birds move in. Barbets, turacos, thrushes, bulbuls, weavers etc. are all attracted by the juicy fruits. Some of the birds make their nests in the tree and during 1980, a Fiscal, Lanius collaris, a Laughing Dove, Streptopelia senegalensis, a Chin-spot Batis, Batis molitor and a Bronze Sunbird, Nectarinia kilimensis all nested in the tree.

My observations on the nesting behaviour were aroused sometime in November 1980 when I saw a pair of Bronze Sunbirds putting up a nest in the tree. The nest was ready by mid-November and a look into it on 22nd November revealed two eggs of unequal size. It was not unusual for me to see two eggs, but a check into a number of bird books indicated that only one egg is usually laid at a time. About 12 days later, in the New Year, my children found a small, frail nestling on the ground below the nest. They called me to see it and on closer examination I realised that the nestling had dropped out of the nest and was dead.

On 10th January 1981 I noticed that the Bronze Sunbirds were busily returning frequently to the nest carrying small insects with them, an indication of some young in the nest. It was not until a few days later that the same pair of Sunbirds were noted feeding a noisy chick perched on a higher part of the same tree. But this chick did not have any feathers of the Sunbird at all !

A few days later it was quite clear that this was a female Klaas Cuckoo, Chrysococcyx klaas, which had taken the Sunbirds for its foster parents. It also became clear that the dead nestling, which dropped from the nest, might have been pushed out of the nest by the parasitic Cuckoo.

During January the foster parents were feeding the Cuckoo chick who fluttered around my garden never moving more than 100 metres from the Pappea tree. The chick called continuously the whole day giving the parents the direction of its movements from one bush or tree to another.

While I have observed a number of Klaas' Cuckoos in the neighbouring forest flying very close or even into the trees where this chick could be located, I have seen none interested in feeding it or even taking much notice of their own kind.

Nathan K. Munyori, Kenya Utalii College,

P.O. Box 31052, NAIROBI

THE LOTUS IN CHINESE COOKING

The East Indian Lotus, Nelumbo nucifera, is the Buddhist symbol of perpetual life and is used extensively in Chinese cooking, and medicine. All of the plant is used : the flower stamens in cosmetics, the seeds in medicine as an aphrodisiac, and eaten raw or cooked in several ways, the leaves are used to wrap round portions of other food, eg. rice or meat, and the lacy patterned root is sliced for soups and salads, and ground to make an arrowroot-like flour.

Both canned and fresh lotus roots are available in Chinese markets. In the Time-Life Book of Chinese Cooking, the lotus is mentioned in several contexts : the root in a vegetarian menu was carved to ressemble spareribs and served with a sweet-sour sauce; the fresh lotus roots in a salad with a sesame seed dressing, and in a stir-fried dish with Chinese mushrooms and bamboo shoots; the seeds are part of an "eight precious vegetable dish" and are used in sweet soups. Locally interested readers can taste lotus roots at the Chinese Garden Restaurant (Aga Khan Walk), if they telephone Mrs Lee with their request five days ahead. (Telephone 336210/336629).

Mary Thatcher, P.O. Box 47074, NAIROBI

(Mike Gilbert of the Herbarium notes : 'The sacred lotus of the Nile was probably originally the water lily Nymphaea lotus and must have earned its name largely because of its combination of beauty and utility. However, it is not a close relative of the Sacred Lotus of India and China, some authorities even placing them in seperate families. This was apparently introduced into Egypt about 500 BC when it largely displaced N. lotus. Nelumbo has leaves held well above water whilst in Nymphaea they are floating, a difference that is immediately apparent in drawings.' Ed.)

ALBINO COLOBUS MONKEYS

On a recent game drive with friends along the fringe of the Mt. Kenya rain forest (Naro Moru track), we came across a troop of Colobus Monekys, Colobus abyssinicus, close to the track. We counted fifteen members of the troop who were active and feeding, though judging by the thrashing of branches there were probably more.

We were somewhat astonished to notice after a few moments observation, that no less than five of the troop were albinos, (three mature adults, 2 quite small juveniles). The degree of albinoism varied; on the three adults all body areas which should have been black were almost imperceptibly grey, whilst the two youngsters were totally white. It was not possible to see whether the eyes were pink.

I have in the past seen a colour slide of a single albino Colobus Monkey (also in the Mt. Kenya forest, I believe), and I am wondering whether this condition has been observed in other colobus habitats. I know little on the subject of albinoism and it would seem reasonable to accept a "one-off" occurrence among animals and birds as among humans. However, to observe five albinos in one colobus troop would possibly indicate some form of genetic malfunction.

Anyone wishing to try and observe this particular troop should proceed up the Naro Moru track, following the signs to the Mt. Kenya National Park. Cross the Naro Moru river (into forestry reserve) and continue uphill for approximately 1 km till you come to a pyramid of river stones on the left. The park road continues straight on. Bear left and follow the track which has indigenous forest on the right, plantation forest on the left. On reaching a narrow bridge over a stream park here and explore the forest in the vicinity.

This track is perfectly passable in dry weather. After the bridge one can continue on through forest and recent settlement and the road eventually takes you down to the tarmac just north of the Burguret river. The river has been crossed upstream from the tarmac which is possible in a saloon car if the water level is low. This is a very pleasant scenic circuit, particularly if one has been to the moorland area in the early morning.

C. Orme-Smith, P.O. Box 78, NANYUKI, Kenya

(Mr Issa Aggundey, Mammalogist at the National Museum comments: "Albino colobus monkeys have been known to occur in the Mt. Kenya area and we have one specimen from there. The available data does not give us much information about the status of the albino populations but it is very interesting that they are thriving." Any further information on this particular troop would be most interesting - please send your observations to the Bulletin Editor. Ed.)

GYNA COLINI (DICTYOPTERA, PERISPHAERIDAE): FIRST RECORD FOR TANZANIA

Pugu Forest Reserve in Kisarawe District, Coast Region, Tanzania, is one of the last renmants of lowland coastal forest in Tanzania (Howell, 1980). The forest and environs contain 12 endemic species and a single endemic genus of plant (Wingfield, 1976). The number of vertebrate species with restricted or unusual distributions are found in the Pugu forest, including the Sokoke Pipit, *Anthus sokokensis*, Kretschmer's Longbill, *Macrosphenus kretschmeri*, and the toads *Bufo lindneri* (Howell, 1979a) and *Bufo micranotis rondoensis* (Howell, 1979b). Casual collecting of invertebrates has yielded new genera and species of even such large, conspicuous forms as millipeds (Hoffman & Howell, in press).

Beneath the Pugu Forest lies one of the world's largest deposits of kaolin (Cilek, 1977). Some kaolin mines in the area are still being worked, but others have been abondoned. The latter are suitable habitats for both vertebrates and invertebrates. From 1971 to the present, such an abandoned mine has served as a study site for research on bats which roost therein (Howell, 1976;1977). An attempt has also been made to collect and identify the invertebrate fauna of the mine and surrounding area.

The mine examined was begun in 1941 but abandoned in 1949. Passages inside form a complex of interconnecting walkways from 2 to 2.4 m high and 1.5 to 2.5 m wide. Except for one dead-end side tunnel, air circulation in the passages was good. There was little variation in temperature, most readings falling within the range of 23^{o} to 27^{o}C. Relative humidity varied from 75% to 80%. The three species of insectivorous bats present and their estimated numbers were as follows: Noack's African Leaf-nosed Bat, *Hipposideros ruber ruber* (Noack), 500,000; Persian Leaf-nosed Bat, *Triaenops persicus afer* Peters, at least 172,000 (both species in the family Hipposideridae) and the Egyptian Slit-faced Bat, *Nycteris thebaica* E. Geoffroy, 300 (family Nycteridae). The presence of high numbers of bats ensured a large and consistant supply of guano, and this rich source of decomposing matter as well as darkness, high humidity and temperature provided suitable conditions for a wide variety of invertebrates, including arachnids (scorpions, pseudoscorpions, amblypygids, spiders and mites) and many orders of insects.

The most conspicuous insects in terms of size, numbers and activity were the cockroaches (Dictyoptera) *Periplaneta americana* (Blattidae) and *Gyna colini* (Perisphaeridae). The former species is the common household pest found in many parts of the world. In the mine, both adults and nymphs of this species occured in large numbers on the surface of guano, under and on rotting timber, and on the walls; densities of $200/m^2$ were common.

Gyna colini has previously been known only from Senegal and Zaire and little is known about its biology (R. Kumar, in litt.). Adults and nymphs did not gather together in large groups as did *P. americana*. The nymphs of *G. colini*, rather rounded in shape compared to those of *P. americana*, were found on and partially buried under the surface of the dry kaolin sand and leaf litter near the entrances to the mine and in the thin surface layer of guano inside. Because of their cryptic, brown-speckled colouration, they were very difficult to see unless they moved. Adult *G. colini* measure about 30 mm maximum length and 15 mm at the widest portion of the thorax. The wings are pale grey colour, and adults closely resemble a fallen dead leaf on the forest floor. *G. colini* adults occured singly, either walking on the layer of guano, crawling on the walls of the mine, or flying towards the lamps of observers. A search for this species in the leaf litter of the forest revealed both nymphs and adults, but the species was much more abundant inside the mine than in the leaf litter of the forest.

When collected, several female *G. colini* expelled ootheca, measuring approximately 20 x 4 x 2 mm. A hymenopteran in the genus *Evania*, members of which are known to parasitize cockroaches ootheca, was collected inside the mine, but no parasitism was actually observed in either species of cockroach.

Following particularly heavy rain in April 1978, some of the kaolin mines still being worked as well as portions of the abandoned mine site collapsed. Changes in bat populations and general conditions in the remaining areas of the mine have been documented (Howell, 1979c), but no attempt has been made to quantify the effects of increased humidity, temperature and reduction of air flow on the invertebrate fauna.

Professor R. Kumar, Department of Zoology, University of Legon, Legon, Ghana kindly identified the specimens of *G. colini* and offered helpful comments. Duplicate specimens are deposited at Legon and in the British Museum (Natural History). Professor P.L.G. Benoit of the Royal Museum of Central Africa, Tervuren, Belgium identified the hymenopteran.

References :

Cilek, V.G. 1977 The origin and development of primary and secondary kaolin deposits in Tanzania. *University of Dar es Salaam Research Bulletin* 2: 33.

Howell, K.M. 1976 An ecological study of three species of insectivorous bats near Kisarawe, Tanzania. Ph.D. Thesis, University of Dar es Salaam.

" " 1977 Ecological studies of insectivorous bats (Class Mammalia, Order Chiroptera). *Univeristy of Dar es Salaam Research Bulletin* 2: 49-50.

" " 1979a Geographic distribution: *Bufo lindneri* Mertens. *Herpetological Review* 10.

" " 1979b Geographic distribution: *Bufo micranotis rondoensis* Loveridge. *Herpetological Review* 10: 101

" " 1979c Natural destruction of kaolin mine bat roosts in Tanzania. *Bat Research News* 10: 8.

" " 1980 Pugu Forest Reserve: the case for conservation. *African Journal of Ecology* 19: 73-82

Wingfield, R.C. 1976 A description of Pugu Hills Forest Reserve. Mimeo. 2pp.

K.M. Howell, Dept. of Zoology, Univ. of Dar es Salaam,
P.O. Box 35064, DAR ES SALAAM, Tanzania

BOOK REVIEW

Baboon Mothers and Infants Jeanne Altmann. Harvard University Press, Cambridge, Massachusetts and London, 1980. 242 pages, black and white photographs. Price U.S.$ 17.50

Jeanne Altmann's book, Baboon Mothers and Infants, presents the first major body of quantitative data on mother-infant relationships and infant development for a primate collected in the field. Altmann, her husband, and their colleagues have been studying the behaviour and ecology of Yellow Baboons Papio cynocephalus in Kenya's Amboseli National Park for many years. The baboon troop which formed the study population for Altmann's mother-infant research has been observed continuously over the past decade.

Infant development and mother-infant relations in monkeys are topics of major interest both among scientists who study primates and psychologists seeking to understand human childhood and parental behaviour. For many years infant monkeys and their mothers have been studied in the laboratory, but until recently, few quantitative studies have been attempted in the field.

The reason for the dearth of such studies of wild monkeys is an excellent one : field conditions make detailed observations of the behaviour of infants and their mothers very difficult. Infants, by virtue of their small size and the protectiveness of their mothers, are often the least visible members of a monkey troop. In additon, when not sleeping or nursing, infants are among the most active troop members. To keep a small infant in view and to record accurately the behaviour of mothers and infants is no easy task ! The Amboseli baboons, however, are a logical choice as they are large enough and visibility conditions are good enough to make a quantitative mother-infant study feasible.

Altmann's study focussed on the social and economic effects on baboon mothers of bearing and caring for infants. Feeding and transporting babies during their first year of life imposes certain energetic costs on mothers. Altmann presents important data indicating that the strong interest shown in young infants by other baboons in the troop also imposes a cost on mothers by forcing them to spend time socializing which they might otherwise devote to feeding or resting. This book includes an exceptionally clear and well-reasoned account of why baboons have evolved their system of infant caretaking; one which balances the competing and complimentary interests of mother and young.

This work provides ample quantitative information for those with a professional interest in primate development and a highly readable and interesting account of an important aspect of baboon behaviour. Yellow Baboons and their close relatives, the Olive Baboon, Papio anubis, are readily observable in most game parks and reserves in Kenya. Baboon Mothers and Infants provides information which enhances even casual viewing of these monkeys.

Dr J.L. Chism, ADC Mutara Ranch,
P.O. Box 24, RUMURUTI, Kenya

OBITUARY

The Late Duke of Portland

The late Duke of Portland or Sir Ferdinand Cavendish Bentinck as he was better known, was a man of many parts and he will always be remembered in Kenya for the many things that involved him. To his friends and adversaries alike, 'CB' was both forthright and firm and he managed to get a great deal done in the many fields that engaged him throughout his life in Kenya.

It would be presumptious for me to comment on 'CB's contributions to Agriculture, Politics, Horse Racing or indeed Kenya's recent 'pre-independence' history but I would say that, despite his very active role in all these, he was always keenly interested and indeed had the time to be involved in the Museum. From the very beginning of the formalised, government supported Coryndon Memorial Museum in the 1930's, 'CB' was active and for many years he served as Chairman of the Board of Trustees, resigning the position in 1970.

The first major phase of the museum expansion which was undertaken to provide new galleries for the museum in the early 1950's was spearheaded by 'CB' and the foundation stone bearing his name is still a reminder of this. He was also actively involved in the complex negotiations that led to the 1980 expansion phase which included the programme to incorporate the present diverse activities of the museum such as the regional museums, the sites and monuments and the primate project at Tigoni.

I remember well the stormy days of 1967 and 1968 when 'CB' had to chair the various Board meetings at which strong 'nationalist' factions argued for rapid expansion and development while more conservative 'old-timers' were not at all keen for change. As a young 'upstart' Administrative Officer in 1968, 'CB's wisdom and gentle direction were invaluable to me in my attempts to respond to the urgency of the moment.

Many museum staff and friends will for ever remember the common sight of 'CB' prowling the museum, surprising people at work, or not as the case might be, and always wearing his large brown hat and carrying a cigar. His intimate involvement with all of the affairs of the museum guarenteed respect from those of us who worked here and his complete mastery of the Board was one direct result. It was with great sadness that he retired from the Board in 1970 but even after that, he remained a true friend and supporter of the National Museum right up to the time of his death.

His last contribution was to arrange for the museum to be given the marine aquarium that has until now been run and housed by the Jockey Club of Kenya in the Charity Sweepstake buildings in Nairobi. This aquarium will be opened to the public at the Museum adjacent to the Snake Park during 1981. 'CB's influence and generosity over this are gratefully acknowledged.

It is impossible to conclude an appreciation such as this but having worked as the Director of the National Museum since 1968, I can say that 'CB' made many, many lasting contributions and I feel it would be fair to state that he was the primary architect of the system and institution that we now know as the National Museum. I personally will never forget the man and I look forward to the forthcoming opening of our expanded library where we will proudly hang a portrait of our former Chairman and friend as a centre piece to the collection of his books which were given to the National Museum by his widow.

Richard Leakey

Kanure Kibui 1929-1981

Kanure s/o Kibui, a longtime worker with the East African Herbarium, Nairobi, died unexpectedly on the afternoon of 12th June 1981 after a short illness at the Mater Misericordiae Hospital.

Kanure was born in Nyeri District in 1929. He joined the Herbarium on 12th March 1951 as a messenger and mounter. He soon learnt to drive which was to make him a very useful assistant as he could drive senior staff cars both on short errands and on plant collecting safaris. He was promoted to Laboratory Assistant in 1962, a position he held until his death.

He spent long periods in the field with botanists but mostly worked with the late Dr P.J. Greenway. Starting in the early 1960's, Kanure accompanied the late Dr Greenway on the many field trips he made in connection with botanical surveys of National Parks both in Tanzania and Kenya. Kanure played a big roll as driver, field assistant and collector on these trips. He contributed a lot to the fine plant collections with Dr Greenway which are distributed to a number of herbaria and they are rightly cited as 'Greenway and Kanure' collections.

When not in the field he sorted and mounted specimens. In the Herbarium he will be remembered as a very hardworking, helpful, willing and reliable worker with a deep sense of duty.

He leaves a widow, seven sons and a daughter.

C.B.

EASTER WEEKEND CAMP TO NGARE NDARE FARM

From 5 p.m. on the Thursday before Easter it poured with rain. It pelted down. In Nairobi sloping roads turned to rushing rivers, with waves. Small and larger geysers appeared where there had been drain covers. St Austin's Road was a slalon course hubcap deep between abandoned cars. Preparations for camping on the slopes of Mt Kenya were made with minimal enthusiasm.

On Friday it was still raining steadily. Some of the abandoned cars were observed to be still in place. Enthusiasm for the outdoor life remained low. It rained all the way to Thika. The Tana River was in tremendous flood (later to be even more tremendous).

Sunshine at Naro Moru - spirits rose. 'Kentrout' was lunched at. Black clouds covered the sky, rain poured down, lightening flashed, thunder thundered, spirits sank. Information was given on the probably state of the road to Ngare Ndare. Spirits sank further. Rebelious murmurs were muttered quite loudly. However, map in hand, our intrepid members continued their safari. Frequently consulting this intriguing document they motored about the countryside. After some re-interpretation the road to Ngare Ndare was discovered. As advised, it was black cotton soil, and also wet. Some ponds, streams, rivers, small temporary lakes were observed to be running across and along it. Perversely, our chief rebellious murmurer decided to now enjoy the trip. He liked the splashes. Apart from one rapid involuntary U turn the journey continued without incident. Later inquiry elecited that other members had bogged down, dug out, towed and been towed. This created a great feeling of cameraderie in the camp when they finally arrived. Interpretations of the map enabled members to see a little of the countryside they might otherwise have missed.

Then two miracles occured. The rain stopped. The road became tarmac. The Ngare Ndare forest was on either side. The road ran steeply but tarmac down. The map indicated that a dry river bed crossed the road. A sharp look-out was kept for this feature as it would confirm the correctness of our route. We noticed a reasonably sized brown river flowing swiftly across the road without any difficulty. The progress of a Peugeot with a CD number plate was watched with interest. Success inspired emulation. And then round the corner of a hill, there was a view. Brown and gold to the horizon - all Africa at least. And some hills, steeply sided, glittered in the sun that was now out. Also one or two brilliant green patches. Our car investigated one of these in depth, but spurning such frivolities, we continued our unremitting quest for the camp.

Mr and Mrs Dyer had been particularly kind, providing not only the site on the banks of a small river, but also water, some shelter, lots of advice and information, and free fruit and vegetables. The children had a whale of a time doing farm things, bouncing in the hay and admiring puppies. There was a water wheel and tractors and two aeroplanes for transport.

Everyone settled cozily into camp. It was great fun watching later arrivals get stuck in the middle. After they had been pulled out we got a splendid camp fire going with the firewood so kindly provided. Miss Allen's Macharia made it his weekend's good deed. In the evening we gathered round to discuss possible activities, bake potatoes, keep warm and boil kettles. Mrs Dyer joined us briefly and offered hot baths up at the house. She advised us to go bird and plant viewing across the river in the morning, as the river usually rose at 3.30 p.m. and was then impassable.

Next morning most people went off on a bird and plant walk. The river came just above our ankles as we crossed the ford. Rather cold. Most birds were naturally seen near the river in the big trees but we went on into the drier bush country where they did their usual thing of shouting loudly and invisibly. Some were glimpsed. Spring flowers were out in carpets, some people remembered the names. From the top of a little hill there were tremendous views stretching to the distant mountains, and to Mt Kenya, almost empty of people, It became hot. Members wandered back, paddled across the ford, lunched and dozed in the shade as all sensible animal life should do in these parts. Your correspondent took a sleeping bag and a book to the thickest shade above the river bank and dozed, read, and tried to discourage the insect life from her person. Suddenly the sound of the river changed. It became much louder and deeper. The water became much more mud coloured, carried more debris and flowed much faster. In a few moments roots of trees clinging to the steep bank were covered. The river changed from a fast flowing shallow stream with stepping stones to a smooth torrent rushing down. It was 3.30 - it had rained higher up on Mt Kenya and the river had risen. At the concrete ford there were brown waves rushing across, and a positive mill race below. one of the boys had been on a rock in the middle of the stream, nice and cool, when he heard the river change its note. He jumped out on to the bank, unfortunately the far bank from the camp. It was quite impossible to cross; one sees how children are always drowning in these streams in the rains. Our lad had to walk a long way upstream to the bridge near the house.

We were then all invited to tea by the truely heroic Mr and Mrs Dyer. They have a noble tea pot. Mr Dyer is also a botanical enthusiast, so a schism party was formed that scurried about uttering weird cries. More sensible people bird walked along the airfield, with all the plains, as before mentioned, stretching below and up to the glittering slopes on the horizon.

That evening, round the fire, Mrs Curtis who had organised the camp, introduced Mrs Rudnai to tell us about her work with lions. Against the racket of the stream, though it was back to its morning volume, in her rather soft voice, Mrs Rudnai told us about the social structure of lions in Nairobi National Park, and that, among other things, lionesses do not find it worthwhile to bring up a single cub, and that she recognised her individual lions by the pattern of their whiskers. It was all very interesting.

Easter Sunday dawned, rather early. A small botanical schism remained behind to later go up the drive (5 miles) to meet Mr Dyer coming back from church to botanise on an interesting hill. The rest of us set off across the stream to bird walk along a ridge to a waterfall. Everlasting Cisticolas in bushes ! The Dyers is the last farm before the desert we were later told, and so one saw. At the end of the ridge was a bush glowing with small red fruits.
"Maasai plum," exclaimed Yvonne Malcolm Coe, "you can walk for miles with one of those in your cheek", and promptly began gathering and eating them. Death did not appear to be instantaneous, though it was suspicious that no birds had yet discovered this delightful bush, so eventually she pursuaded us all to try. They were very like plums, rather tart, and the skins had an almond flavour when bitten on which became bitter if chewed. It was better not to eat the skins as they

are very astringent. Some of us also gathered and ate the tiny white mushrooms that come up on termite heaps in the rains, delicious, if gritty. So it was a weekend of gastronomic exploration. After a while, having scrambled down a steep valley to the river flowing under huge fig and other trees, with all the evidence of having been in spate earlier, and then walking some way up the river, some of us found a most impressive waterfall, 20 metres high or more, with a cave and deep looking brown pool below. Quite a sight. Others of us found other waterfalls. One of us walked back alone and was hissed at by a moderate sized gaint tortoise.

All were safely back over the river and in the shade by one o'clock, ready for a late lunch. And then, around three o'clock, remembering the Dyers' warning about the river rising around 3.30, and the drama of the day before, people kept an eye on the river. Some moved to the ford to have the best view. Chairs were brought. Detective stories were read to while away the time of waiting, and cameras were brought to record the event. Time passed. Chat was chatted. A herd boy paddled across the stream on his way to the farm. The water just covered his ankles. We added interest to his day. More time passed. Ants were a nuisance. The herd boy came back. He had two bags of posho. He had never seen anything quite like us, and indeed he may have a point there. The river didn't rise, and definite complaints were voiced.

In the evening Mr Dyer came and told us about the farm, and fascinating stories about the early days. Those settlers were a very enterprising lot in a now largely vanished world.

And, on Monday, loaded down with cabbages and advocados, we went. The roads all dry, so much easier to go than to arrive, and we had had a delightful weekend with all thanks due to the organizers and to the Dyers for their hospitality.

Caroline Gilbert

CAMP IN CHYULU HILLS, 29th MAY - 1st JUNE 1981

The first vehicles to reach the foothills of the Chyulu were in by 3 p.m. on the 29th and we were rewarded by a clear evening with a fine view of Kilimanjaro. There was a fair amount of game on the plain, including zebra, eland, wildebeest, kongoni and one oryx. Two vehicles that reached the plain just before sunset were rewarded by spotting a cheetah.

The grass was very high (and there were quite a few ticks) but it could soon by slashed down, and by the afternoon of Saturday 30th, about 20 parties were in camp, mostly in 4-wheel drive vehicles. Yvonne Malcolm Coe led two enjoyable bird walks and her sharp eyes and keen ears had soon added 37 birds to the Chyulu Check List, including the Pigmy Falcon, Polihierax semitorquatus. It was realised that the 1938 Coryndon Museum Expedition had not extended as far as the northern foothills where birds of the open savannah were found.

On Sunday 31st, despite cloud on the tops of the hills, most participants accompanied Prof Robins to visit one of the most spectacular craters, 'Giant Crater', followed by an inspection of the hutments (above the only water point) where it was easy to pick up recognisable fragments of pottery from a settlement about 400 years ago. The large number of cars parked above the water point thoroughly alarmed the poachers who camp by the water, and by the afternoon all had decamped. BUT the number of dingy men with large sacks over their shoulders frequenting the hills was disquietingly high and it was felt that the Warden of Tsavo West National Park should take more frequent action to flush them out.

On Sunday afternoon Mike Gilbert obligingly led two parties into the Chyulu montane forest, where one marvelled to see dense forest vegetation, fed by the clouds and mist, growing out of huge boulders. Marks of scarring on the bark of trees on the forest edges next to the grassland suggested that the sporadic burn-off of the grass in the dry season served to limit the further spread of the forests.

Hyaenas, jackal and distant lion were heard at night, and all participants enjoyed the unspoilt beauty of the Chyulus. Many who had not come previously were obviously determined to make a further visit, while the Nairobi School members were encouraged to persevere with the Chyulu Project.

Peter Johnston

INFORMAL SUNDAY OUTING ON 17th MAY

At 8.30 a.m. (more or less) four or five cars assembled outside the Museum to go somewhere nice for a ramble and a picnic. Owing to unforseen circumstances, neither the leaders and originators of the trip were able to come, but the day before they telephoned a friend who thought that everyone would be meeting anyway, and as they themselves would like to go, that the trip may well take place as planned. All the planning involved, after all, had been to fix the usual time, 8.30 to 9.00 a.m., and place, Museum, to meet, with the intention of spending the day in a vaguely natural historical manner, within easy distance of Nairobi. Unfortunately the Bulletin had been late, so people only heard about the trip by word of mouth.

So our noble Acting Leaders, as it were, late naturally, said that the intention was to go down the Magadi Road and either turn off on the side road that Priscilla Allen and Yvonne Malcolm Coe had suggested, or perhaps to Olorgesailie, and what would everyone prefer ? and how about sharing cars as much as possible with petrol costing such a fortune, and let's meet round the other side of the Ngongs so that cars could catch up. It was thought that the Magadi road sounded just the thing, warm at least, and agreed to wait - a good thing too as our noble leaders were naturally last again.

We found the road on the left, by the second "Steep Hill" sign, without any difficulty. Everything was very green. The road went first along the top of a ridge, with tremendous views, then plunged fairly steeply and stonily down to a river. It's the same place Priscilla led a trip to a few months before. We arrived at 10 a.m., plenty of time for a little walk just before lunch. The vegetation was not terribly interesting, as it had been quite heavily grazed before the rains, but it was a very pleasant little walk for us city dwellers. Lots of grasshoppers, not very large and rather vividly coloured, some caterpillars, butterflies, termites and ants. We saw two Chin-spot Batis building a nest in a tree overhanging the river. The river had obviously been in spate not very long before, but it was pleasant to walk in. Fortunately the day was overcast. We saw a pair of eagles, with nest, but as we had no expert with us who could determine the species, it went unidentified. We also saw a pair of falcons, but again no species. But we did see a Steel Blue Whydah, a first for everyone I should think, quite unmistakable, and even identifiable on the spot from Williams. Very nice that was. And four different species of sunbirds were seen in one bush ! A burning bush it was - Grewia with yellow flowers - and in this one little bush there was a Scarlet-chested, Beautiful, Mariqua and Violet-backed. Then everyone slowly pottered down. Some vegetation was noted and identified. A massive grasshopper tried to lose itself on members of the party.

We slowly had lunch in the shade of the river. The programme for the afternoon was discussed, i.e. one car said they'd go on to Olorgesailie, another that they'd go back for the rugby, another that they's sit and digest and the Land Rover and Toyota thought they would see where the road went. They did drive on for some time but they came to the bank of a river that was so steep that they did not think it was worth the labour to continue. Our noble leaders also continued a very little way, but were defeated by a rather steep gully where they saw a Beaked Snake. In the distance, further along, were some tremendous cliffs. That might be a nice place to go sometime.

Now there is a reason for describing this harmless, pleasant, ordinary, not madly strenuous Sunday in such mind shattering detail; that is, just to point out that it was all those things. Possibly our leaders were endowed with all those qualities of leadership which discomfort and expensive schools are at pains to inculcate, but there was certainly no cause to display, far less exercise them. All that was necessary was to fix on a time and place to meet. Willy nilly the first improper, informal Sunday trip had taken place. By unanimous resolution of all the leading lights (under bushels) in the Nat. Hist. Soc. it had been resolved that there shall be more.

Meet on the second Sunday of the month, with picnic, outside the Museum between 8.30 and 9.00 a.m. Where possible a place and leader will have been decided on, but if not, everyone's there, prepared for a day out, and very little discussion will come up with something. Everyone should think of a good place they've been to, not too far from Nairobi, where they wouldn't mind a few people coming along too. All that remains is to fix the route, share cars as much as possible, and have a good time.

Caroline Gilbert

NEST RECORD SCHEME - IMPORTANT NOTICE

As I will be leaving East Africa at the end of July 1981 it has been necessary to find a new Organizer for the Nest Record Scheme.

Barry Taylor, who arrived in Mombasa from Zambia in December 1980, has kindly agreed to take on the task. Barry is an extremely keen ornithologist who has been very active in Zambia over the last few years. The members of the EANHS Executive Committee were happy to approve the decision, and I have already handed over all the files, cards etc. to him.

The new address for the Nest Record Scheme is :-

Mr P.B. Taylor,
P.O. Box 87336,
MOMBASA.

The Nest Record Scheme report for 1980 will appear shortly in The East African Bird Report 1980, Scopus 4 (5). As some contributors may not receive Scopus, I would like to thank all those who have helped to add to our knowledge of the breeding of East African birds. We have been able to accumulate 14 box files of NR cards (involving many thousands of records) over the last twelve years which are available to anyone who is interested in this branch of ornithology. I hope that all current contributors will continue to support the scheme and encourage other members to participate.

Hazel Britton, P.O. Box 90163, MOMBASA, Kenya

KAKAMEGA FOREST REST HOUSE

Mr Gillett at the Herbarium thought it would be a good idea to inform members of the Society through the Bulletin that the forest station rest house at Kakamega Forest is again in operation. It is a superb new building built on pilings with a wide veranda. This allows good bird and monkey observation. As of yet, cooking facilities are fire wood in the rear kitchen room. The cost is Shs 25/- a night. For those without a car, there is a bus that passes the forest station road entrance. It is an Eldoret-Kisumu bus which goes by way of Shinyalu and Kheyega - we caught it about 9.30 a.m. in Kapsabet.

Lynwood M. Hume, P.O. Box 526, MACHAKOS, Kenya

SOCIETY NOTES

Birds of Africa by our Chairman, John Karmali, is back in stock and autographed copies are available to members at a special discount price of Shs 225/-.

Birds of East Africa by Peter Britton (ed) and members of the Society's Ornithological Sub-Committee can be purchased from the Society's office in the Museum. Price Shs 130/-.

Breeding Seasons of East African Birds by the late Leslie Brown and Peter Britton is still on sale to members at Shs 80/-. Available in the office.

Check List of the Birds of Kenya - this popular check list can be obtained from the office at Shs 10/- per copy.

The Bundu Book of Trees, Flowers and Grasses (No. 1) is now in stock - members discount price Shs 35/-.

The Bundu Book of Birds, Insects and Snakes (No. 2) also on sale at Shs 35/- to members.

Common Trees of the Highveld This well illustrated and informative guide is a real bargain at only Shs 30/-.

A Field Guide to the Aloes of Rhodesia in the Bundu Series is illustrated with excellent colour plates, members price Shs 45/-.

Flowers of the Veld (Bundu Series), again with lovely colour plates, only Shs 30/-.

Birds of the Highveld by Peter Ginn, also in the Bundu Series, is only Shs 35/- to members.

Birds of the Lowveld by Peter Ginn (Bundu Series) Shs 40/- to members - the majority of birds covered in these two books are found in East Africa.

Butterflies of Rhodesia (Bundu Series) by Richard Cooper is an excellent guide and a must at Shs 40/- to those interested in the butterflies around them.

Snakes of Rhodesia, the final book in the Bundu Series is Shs 55/- to members and selling well. For all the above Bundu books, please place your orders as soon as possible as stocks are limited. All can be obtained from the Society's office at the Museum.

Eagles by Leslie Brown (1955). A second hand copy in good condition on sale - Shs 130/-. A most readable and interesting book. Please contact the Secretary, P.O. Box 44486, NBI.

A Bird Watcher in Kenya by Vernon D. van Someren (1958). A second hand copy in good condition, including dust cover, Shs 130/-. An interesting book and recommended to those new to Kenya birds and bird watching.

A Field Guide to the Birds of East and Central Africa by J.G. Williams (1963, 1st ed.) Used, with some pencil notes and coloured underlining. Shs 80/-.

Gardening in East Africa by A.J. Jex Blake (1957) fourth edition. Completely re-bound in black and in good condition. Shs 150/-. Available from the Society's office.

Nest Record Scheme Please note that the new address for the Nest Record Scheme is P.O. Box 87336, MOMBASA - the scheme is now being run by Mr Barry Taylor as Peter and Hazel Britton are leaving Kenya at the end of July. We wish them well.

Library Members are reminded that the Society has a magnificent Africana library which is housed in the National Museum. Full members may borrow non-reference books and junior members rae welcome to read in the library but not take the books out of the library. The Librarian would be pleased to show you around.

Office Hours We try to keep the office in the National Museum open during the week from 9 a.m. to 11.45 a.m. and from 2 p.m. to 4 p.m. As the job is voluntary it is sometimes difficult to keep to these times and we apologise if members have trouble contacting us. Messages can always be left with Mr Clifton in the Entomology Dept or in the Library.

Bird Ringing Scheme Members are reminded that the Society runs the Bird Ringing Scheme - the able organizer is Mr Graeme Backhurst who can be contacted at P.O. Box 24702 Nairobi. If you are interested in joining the small group of dedicated ringers please contact Mr Backhurst direct.

Bulletin Copy Thanks to those members who have contributed their natural history observations for publication in the Bulletin. More are always needed, so please write up the interesting things you noted on your last trip and send it in to The Editor, Mr Clifton, P.O. Box 44486, Nairobi. Only with your articles can we keep the Bulletin going, so please help.

Help needed During August or September the Society office will be moving from its present location at the back of the Museum. Are you strong and could give us a few hours of your time ? All the publications presently housed in the office and store will have to be shifted, probably up stairs, so if you could help please contact the Secretary.

Half Year Subscription From 1st July new members can join the Society for only Shs 35/- and receive publications and attend functions from that date. Please tell your friends.

Society Trips Suggestions are always welcome about interesting places to visit and members are needed to lead these trips. Please keep this in mind on your next safari and contact the Secretary with your ideas. For example, we would like to have a trip to Kakamega Forest in western Kenya. Would a knowledgeable member be willing to lead such a trip ?

NEW MEMBERS

The following New Members have been elected to the Society :

Local Full Members :

Seietsu Aki, S.A. Kyeni Sec. School, P.O. Box 6055, RUNYENJES, Embu, Kenya
Mr C.J. de Bruin, P.O. Box 49239, NAIROBI
Sheena Foley, P.O. Box 46578, NAIROBI
Mr E. Francescon, P.O. Box 42290, NAIROBI
Mr Laurence Frank, P.O. Box 47557, NAIROBI
C. and L. Legg, P.O. Box 30218, NAIROBI
Mr Peter H. Lewis, P.O. Box 25045, NAIROBI
Mr S.F. Moosajee, P.O. Box 11954, NAIROBI
Dr Raymond Morton, SECID/GOK Project, Eherton College, P.O. Private Bag, NJORO, Kenya
Dr Frank G. Muller, UNEP, P.O. Box 47074, NAIROBI
Dr P.T. Robertshaw, P.O. Box 30710, NAIROBI
Mr Renison K. Ruwa, K.M.F.R.I., P.O. Box 81651, MOMBASA, Kenya
Mrs Ann B. Usher, P.O. Box 47074, NAIROBI

Local Junior Members

Emanuele Gallmann, P.O. Box 45593, NAIROBI
Nigel Legg, P.O. Box 30218, NAIROBI
Sonya Legg, P.O. Box 30218, NAIROBI
Saina Leseyw, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI
Rick Mathews, P.O. Box 47448, NAIROBI
Francis Ndungu Mwicigi, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
O.K. Ngari, Marsabit House, Nairobi School, P.O. Box 30047, NAIROBI
Miss Davinder Ubhi, P.O. Box 12047, NAIROBI
Philip Wahome, P.O. Box 75299, NAIROBI

Overseas Full Members

Keith Oliphint, P.O. Box 207, MBEYA, Tanzania
Robert Shaw, P.O. Box 21484, KITWE, Zambia

Overseas Life Member

Mr Ken Davis, 2618 NE 86rh Street, SEATTLE, Washington 98115, U.S.A.

Overseas Institutional Member

National Library of Australia, Acquisitions and Serials Dept., CANBERRA, ACT 2600, Australia

Remember that from 1st July local members can join the Society for Shs 35/- and receive publications and attend functions from that date. Application forms available from the Secretary.

SOCIETY FUNCTIONS

Sunday 12th July 1981 An informal day trip to an area close to Nairobi. Please meet at the National Museum between 8.30 and 9.00 a.m. with ideas on where you would like to spend the day, and a picnic lunch. (Please see page 78 of this *Bulletin* for more details on these informal trips).

Monday 13th July 1981 in the Museum Hall, Nairobi at 5.30 p.m. Dr Celia Nyamweru will give another of her popular illustrated lectures on 'The Geology of Eastern Kenya'. Copies of her new book *Rifts and Volcanoes* will also be on sale.

Monday 10th August 1981 in the Museum Hall, Nairobi at 5.30 p.m. A screening of the famous Alan Root film, *The Year of the Wildebeest*, kindly loaned to us by the Wildlife Clubs of Kenya.

Sunday 16th August 1981 A day trip in the Nairobi area. Please meet at the National Museum at 9 a.m. and bring a picnic lunch.

Monday 14th September 1981 in the Museum Hall, Nairobi, at 5.30 p.m. Mr Richard Leakey will give another of his popular lectures on perhistory.

(Friday 18th) Saturday 19th/Sunday 20th September 1981 A camp in the Bissel area on the Athi River/Namanga road. Members will have to be self contained and carry all food and water. Please complete the enclosed slip if you wish to participate and return it, with a stamped, self addressed envelope, to The Secretary, P.O. Box 44486, Nairobi before 11th September. Full details and route will then be forwarded to you.

Saturday 26th September 1981 (PLEASE NOTE CHANGE OF DATE) A 'dudu crawl' with a difference, led as usual by Mike Clifton, Entomologist at the National Museum. Please meet at the National Museum at 6 p.m.; from here Mr Clifton will demonstrate, in the Museum grounds, the different techniques of catching insects at night. Please bring warm clothing.

Monday 12th October 1981 in the Museum Hall, Nairobi at 5.30 p.m. Lecture or film show - full details in next *Bulletin*.

Saturday 17th/Sunday 18th/Monday 19th October 1981 Weekend trip to Mara Buffalo Camp. The Society is fortunate enough to have been offered this lovely camp once again at a special members price of Shs 200/- per person, per night, full board. There are unfortunately no long weekends suitable for this trip so we finally decided on these dates as Tuesday 20th October is a public holiday. The camp, now under new ownership, is situated on the banks of the Mara River and is a good locality for birds and plants, not to mention the mammals for which the Mara is famous. All members wishing to take advantage of this offer should complete the attached form and return it, with payment in full, to REPOTEL, P.O. Box 46527, Nairobi as soon as possible to avoid disappointment. The form must accompany any bookings in order to secure the Society's members discount rate.

Sunday 25th October 1981 (PLEASE NOTE CHANGE OF DATE) Dr Adrian Lewis of the Geology Department, University of Nairobi, will lead an evening trip to Hells Gate, Lake Naivasha for geology and birds. Full details in the next Bulletin.

THE ARK We hope to be able to take over this famous game viewing Lodge in the Aberdares early in 1982...please let the Secretary know if you would be interested in this trip so that we can have some idea of the number of rooms that would be required.

Wednesday Morning Bird Walks Museum 8.45 a.m. rain or shine.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton **(Editor EANHS Bulletin),** Mr. S.G. Njuguna, Dr. D.J. Pearson.
Co-opted Members: Mrs. H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Dr. A. Hill, Dr. F. Owino.
Journal Editorial Sub-Committee : Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas.
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, P.L. Britton, Mrs. H.A. Britton, P.B. Taylor, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee : (Society representatives) Prof. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee : Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor **(EANHS Bulletin),** Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
1
E135
~~81~~
NH

EANHS

BULLETIN

SMITHSONIAN
APR 5 1982
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN SEPTEMBER/OCTOBER 1981

CONTENTS

Encounter with Mountain Gorilla 86
Concentration of Giraffe 91
The Nandi Bear 91
Hawkmoths in my Garden 93
A Brief Guide to Plant Names Part 1 94
A Loranthus and it's Birds 96
Back Yard Birds: Bandera Lane, Nairobi 98
"Things are Pretty Dull Birdwise These Days" 100
Requests for Information 103
Society Notes 103
New Members 105
Society Functions 106

APR 0 1 1982
S/P DISTRIBUTION

ENCOUNTER WITH MOUNTAIN GORILLAS

I suppose there are places in Kenya where the shambas press right up to the edge of a National Park, but the Parc National des Volcans of northeastern Rwanda really does give the impression of an indigenous island, rising precariously from an infinity of cultivated landscape.

I won't deny that I find such cultivated landscapes beautiful, with their patterns and endless variations on green, but the fact remains that, for the entire 118 km drive to the foot of these volcanoes from Rwanda's capital, Kigali, we twisted, climbed and bumped our way through a continuous shamba carpet that filled the marshy valley floors with rice fields, and then blanketed even the highest and steepest of the hills with small, unterraced plots of matoke, beans, sorghum and maize. Nor was there an indigenous tree, to my little botanical knowledge, until we neared the Parc: Eucalyptus everywhere.

So, despite the character which, as I say, rural Rwanda definitely exuded for me, the sight of the forested mountainsides of the Parc National definitely came as a refreshing change. Looking up at the steep bamboo and Hegenia clad slopes it was quite easy to feel some familiarity, and in fact the origins of those highland habitats are analogous to those found in Kenya.

For these volcanoes, the highest peaks of the Virunga, have been produced in geologically recent times (Pleistocene-Recent) by volcanism associated with the rifting disintegration of the eastern side of the African continent. Thus they straddle the floor of the western or Albertine rift immediately to the north and northeast of Lac Kivu, marching eastwards to form a natural mountain barrier between, firstly, Zaire and Rwanda, and then Rwanda and Uganda.

The Virunga chain consists of eight major peaks. At the western end, in Zaire, Mts. Nyiranongo (3,470m) and Nyamuragira (3,056m) are still active, the former with a turbulent lava lake deep within its crater. Moving eastwards, but still just inside Zaire, the almost bare, rocky summit of Mt. Mikeno (4,437m) is relatively older and thus more eroded. Then to the northeast, runs the Parc National des Volcans, a thin sliver of highland, 45 km long and up to 10 km wide, perched right on the northeastern tip of Rwanda. The Parc contains the major volcanic peaks of Karisimbi (4,507m), Visoke (3,711m), Sabyinyo (3,674m), Gahinga (3,474m) and Muhabura (4,127m). Mt. Sabyinyo, like Mt. Mikeno, is slightly older, and its eroded and gullied summit has a distinctive toothed appearance from whence it derives its name.

But, despite these small relative age differences, all of these volcanoes are really young, and they preserve classic, if vegetated, steep conical shapes. All of the Parc is above 2,200 m, and clothed in the Afroalpine vegetation so familiar to us here in Kenya :- bamboo-Hagenia forest - giant lobelias and senecios-alpine moorland. But although these volcanoes resemble highland Kenya in many ways, they are in one respect radically and unforgettably different: along with the Kayonza Forest which lies just to the north, the Virunga house the easternmost populations of the Mountain Gorilla.

Gorilla gorilla berengei was in fact discovered on Mt. Sabyinyo in 1902 and, despite extensive hunting and poaching, the steep forest and thicket slopes still retain a population. The gorillas live in troops, three of which have been partially habituated to human presence to facilitate viewing by tourists. This has in the past been a small scale activity but this year, due to a huge boost in Rwanda's diminutive tourist industry, the gorillas are for the first time 'fully booked'.

Don Turner recently organised an excellent group excursion to Rwanda, which included two days on the Virunga. Having spent the first of these days in the Parc birdwatching (well, first things first, after all), I went to visit the gorillas on 7th July.

Put like that, the impression could easily be of a five minute amble through sylvan glades to a reclining and tame Chimps' tea party, with pictures of them and me, me and them, and then cafe et croissants and "Mon Dieu, vive la difference !". But it isn't so, and a good thing too.

All of the gorillas are completely free to roam in the forests, and the tracking begins where they were seen on the previous encounter (usually the previous day now that they're fully booked), leading to the detection of the 'nests' where they slept, followed by the tracking of their morning's progress through the thickets. Thus detection can be relatively quick, ie in an hour or so, or not, ie five to six hours of thickets, mud, ravines etc. But that only makes it more real - if one likes one's animals viewed from the ease of the lodge terrace, this might not be one's prawns au gratin .....

Transport dropped us in the shambas below the bamboo thickets of the Parc. 'Us' comprised a Parc National tracker, a porter, three American tourists and myself; at the Parc boundary we came under the charge of an African Wildlife Leadership Foundation guide, who had been studying the particular troop of gorillas that we were to visit for 18 months. This guide inspired confidence, which was just as well in view of later events, and gave us full instructions on how to behave in the gorillas' presence: no sudden movements - no speech at all - no turning your back and/or running away - crouch or lie prone and always keep below the level of his, the guide's, forehead - never shake any leaves or branches - stare the gorillas in the face ......

I don't mind admitting to having viewed the prospect of the coming encounter with more than a little perturbation, particularly as an earlier visitor had recorded fundamental terror as his basic impression, but more of that later.

We moved up into the bamboo, walking upright wherever possible. The tracker was excellent, leading us forward through a maze of glades, thickets and gullies. He and the guide were looking for the nests, searching seperately and uttering low whistles to attract each other whenever the trail revealed itself. I brought up the rear of the column, thinking it the safest spot, and the porter ahead of me frequently pointed out tracks and signs: elephant and buffalo footprints and dung, and then, later, branches that had been broken by the gorillas, and bare stems which they had stripped of their leaves.

The going was not steep, but the thickets often reduced us to crouching or crawling on all fours. The recommended long-sleeved shirts, long trousers and gloves were a great protection against the many thistles and nettles, but prolonged kneeing-it through bamboo thickets (as came later) could also use a set of knee-pads. July is the dry season in Rwanda, so that the thick black soil was either pleasantly soft or a little damp; this exercise would be rather more glutinous and unpleasant in the rains !

After about 1½ hours of apparently haphazard threading through the thickets, the guide told us that we were nearing the gorillas, and that all the encounter rules strictly applied. So we adjusted cameras, crept forward and there, 30 m ahead in the mesh of the bamboo, was a large, rounded, black shape which, after remaining quite still, slowly melted into the greenery.

This was a poor first view, and it was to frustratingly repeat itself for the next two or so hours. The elephant spoor that we had seen came from animals that had passed through the thickets the previous night, scaring the gorillas considerably. Thus, the following morning, the apes were nervous and timid, not stampeding from us but still keeping their distance.

We followed as silently as possible, trying to keep in a close group and always watching the guide's actions. Walking was nearly all crouched from the waist while, when actually in sight of the quarry, going was on all fours or stomachs. Photography was difficult, with exposures around 1/125 f.2.8 (400 ASA) in the dim thickets, while accurate focusing was hindered by the intervening vegetation.

But, as the animals forgot the fears of the night and, I suppose, gradually became used to our party, we edged even closer to them. During this time the guide frequently uttered a low grunting cough, a polite clearing of the throat, which calmed the gorillas and reassured them that we were friendly.

The group that we were following consisted of one huge silverbacked male, two smaller, all black females, and two or three juveniles. To label the male huge is rather diffuse; I suppose he would be about 1½ m tall, while Schaller (1963, 1964) quotes weights of 300 - 450 lbs for wild, fully grown silverbacks. A significant proposition.

The first close views, and possibly the most exciting instant, came after the troop had disappeared into some particularly thick greenery. We moved after them quite rapidly, evidently too rapidly, and dropped onto our knees to pass through a ½ m high tunnel in the undergrowth. I was luckily directly behind the guidé, and was the only other of our party to witness the ensuing scene.

As we crawled in this tunnel, there came from ahead an uproar of barking, screaming and crashing. The guide stopped dead, stiffened and began to give the grunting call ungently and continuously. What was happening ?

Curiosity clambered over fundamental apprehension, and I edged forwards so as to be able to see over the guide's shoulder - to look straight into the smooth black face of a female gorilla, about a metre from the guide and staring intently at him.

That was a singular and unforgettable moment: man and gorilla, face to face, the one on hands and knees and emitting animal grunts, the other on feet and knuckles, large brown eyes in an inscrutable smooth black face, starring each other down until the female apparently lost interest and melted off into the scrub. Game viewing is one thing, but gorillas are entirely another experience.

The cause of this confrontation was simple. One of the two females in this troop had of late been edgey and belligerant, and our pursuit into the dense area of the thicket was evidently too close for her temper. Instantaneously she had screamed and charged, her calls echoed by her companions, to stop only a metre in front of us. To be in the presence of something so powerful, and yet to feel, perhaps foolhardily, immune from its threat, is a unique experience.

In spite of this aggression, we continued after them, and gradually drew closer. They occasionally passed through small clearings where photography was easier, but most of the progress was through bamboo.

At last we saw the huge silverback 30 m ahead, reclining in relatively open undergrowth. The rest of his group were unseen, but could be detected by sporadic grunts, and by the biting and crunching noises as they took the choicest bits of plant matter around them - as someone remarked at the time, like living in your own salad bowl.

The male was inert, and thinking about his midday sleep. Completely flat, we edged forward to about 20 m and lay watching, and the second close encounter began. A juvenile appeared and started to play and roll with the silverback, apparently oblivious of our presence. But then the playing stopped and the juvenile stood upright, looked in our direction and ambled straight at us. He reached the guide, who was slightly to the front of our prone group, and looked around at us all with curiosity obviously mastering underlying basic uncertainty; I think we all felt much the same.

The guide, flat on the ground and perhaps on an eye level with the youngster's navel, very gently picked up a small stick and held it up to the gorilla which, beyond all expectations for me at least, accepted it and stood there still regarding us.

And suddenly it was gone ! The stick dropped, a small spring, time for one blurred photo, and the youngster had swarmed up into the slender bamboo, to sway precariously about 3 m above our heads.

During this time, two of our party had been making open but quite low amplitude hand signals to each other, the sort of thing that young couples do when near gorillas, regarding exchange of cameras, each other's movements etc. The reclining silverback had appeared impassive while his youngster was amongst us, but in reality he was becoming increasingly agitated by these apparently unobtrusive signals.

Suddenly he barked, leapt up and charged straight at us. Everyone ducked in what they each supposed to be an imperceptible attempt to burrow into the ground, and the animal came to a rest within two metres, an incredibly exhilarating spectacle, standing on all fours and staring above and through us in a superb posture of dignified and monumental threat.

Following our instructions, we lay very low and stared motionlessly back. To our deep relief, the gorilla walked off ten metres to collapse on the flank of our group. It started eating. We stared warily back at it. The infant still swayed and crashed directly over our heads.

The trouble was that all this apparently informal knowledge as to the cause of its irritation and subsequent charge was gleaned later from the guide, so that the aforesaid two of our party were continuing the muted signals to each other, while for the guide to urgently signal them to stop would of course only worsened matters.

So the male erupted again, instantaneously and seemingly impossibly leaping up from his chewing repose, and barrelling across the clearing within a metre of our bows, like a frenzied Llanelli forward with the uprights looming large in his ever narrowing celtic vision. And not the trace of a pause at the edge of the thicket, just the same charge straight at and through it. And the youngster above crashed and fell after him, to instantly disappear into silence. We were suddenly alone.

Aspects of this behaviour are interesting. The direct stare was emphasised and unexpectedly effective, yet Schaller (op. cit.) interprets it as a direct threat in gorilla behaviour, much as it often is for man. Was the gorilla intimidated or did it just loose interest ? Or is it habituated to pacifying stares ? The guide also described the period of quiet eating between two charges as displacement behaviour, ie the creature being undecided between attack and flight, and thus indulging in some quite unrelated activity.

I suspect it would have made off had we been standing, but who is to say and furthermore who is to try it ? Confrontations between silverbacks usually consists of threat displays, but quite possibly erroneous and sensationalistic stories from other countries tell of Parc guards being torn to pieces or hurled into trees. Certainly the advice not to turn and run is sound, as gorillas usually attack fleeing adversaries by running after them on all fours and snapping at them like dogs with their formidable teeth (Schaller, op. cit.).

After this we followed them again for a short while, but the aggressive female was rapidly becoming more so, causing our guide to break the encounter. We had been with the troop for over three hours, and I don't think anyone relished the prospect of the hours of backtracking through endless bamboo. But one easy clearing led to another, and opened into shambas in five minutes flat. The gorillas are apparently often near the edge of the Parc, even in open view from the adjacent fields, which only goes to emphasise their vulnerability.

How much longer can they survive the ravages of the trade that supplies their heads, hands and feet as tourist mementos ? Poaching is apparently rife just over the Virunga in Zaire, where the frightened troops are far more wary and difficult to see, but the Parc National des Volcans itself is far from immune.

During our brief visit to the Parc - two days in something like 90 sq km - one of our party found six snares, and we all saw others. A noose of brake cable is attached to a bent bamboo which, on disturbance, springs upwards and draws the noose tight. These snares may not of course be meant for the apes, but the snake is an indescriminate operator, and our parties also saw several gorillas lacking the hands and fingers that had been caught. How many more had been caught and killed ? These amazing creatures, even more amazingly, apparently lack the intelligence to loosen the slipknots .....

It was on the Virunga volcanoes, 79 years ago, that the Mountain Gorilla was first introduced to the world at large. Will it still be there for its centenary ?

References
Schaller, G.B. 1963 The Mountain Gorilla:ecology and behaviour. University of Chicago Press.
" " 1964 The Year of the Gorilla. University of Chicago Press.

Adrian D. Lewis, Dept of Geology,
P.O. Box 30917, NAIROBI

CONCENTRATION OF GIRAFFE

On 3rd January 1981 we were travelling to Keekorok Lodge in the Mara when at 11.30 hrs we came upon a great number of Southern Giraffe, *Giraffa camelopardalis giraffa* moving steadily in a westward direction towards the Mara River. They crossed the main Narok-Keekorok road one and a half kilometres or so beyond the signpost to Cotters Camp. I counted one hundred and twenty of them as they passed in twos and threes in a long file, extending for nearly a kilometre. There were probably more as the head of the line was already out of sight and there may well have been a few stragglers in the distance at the rear.

The greatest number I have recorded before was seventy eight in all, near the road from Amboseli to Sultan Hamud, 24 km from Sultan Hamud itself.

Sir Michael Blundell, K.B.E., P.O. Box 30181, NAIROBI

THE NANDI BEAR

Stories of the Nandi Bear go back beyond the First World War. This was a huge animal which lived in the forest and from time to time killed villagers usually by decapitating the victim. Specimens are said to have been shot but these never found their way to a zoologist or to the museum so the identity of the creature remained a mystery.

More recently, around 1957 - 1958, two animals were shot by the manager of Chemomi Tea Estate in Nandi and they were taken to the tea factory where they were viewed by factory staff. I recently interviewed three old men who had seen the bodies and each gave a description of what he had seen and told me that the "Bwana had run into one of the animals at night and he had then returned to his house for a gun and shot the injured creature and a second animal". Later the skeletons of the animals had been left in the bush to be cleared by safari ants.

The old men's descriptions tallied in most points. The animal stood almost a metre high at the forequarters which were broad of chest and the shoulder carried a heavy mane of long hair. The head was short and broad, ears small. The body sloped with long heavy fore legs and shorter hind legs; tail short. Colour description varied, one man said it was spotted with black on a lighter colour, the other two remarked it was grey-brown with light tips to the fur. All said they had never seen such creatures.

Ken Archer, General Manager of Eastern Produce Company told me that Douglas Hutton, the Manager of Chemomi Estate who shot the animals, had sent the skeletons to Nairobi and the report received from the museum was that they were of a "Giant Forest Hyaena". I have not been able to trace these skeletons or any record of them, so the mystery remains.

At the end of July 1981, Ken Archer received word that a strange creature had been seen by farmers cultivating small plots on the Nandi Escarpment road from Chemilil to Nandi so he visited them to get their story. Later he telephoned the writer and Richard Leakey suggesting that an investigation might be undertaken and invited us to stay with him. On 12th August I went to Nandi and, with Ken Archer, visited the shambas where the creature had been seen.

At one group of huts the womenfolk said that a strange animal had been around their huts but they were unable to describe it, however at a second group of dwellings an old man described how the creature had walked round his hut in the early morning and then it lopped off across his shamba and so into the next where somebody threw a rungu at it and it disappeared into the maize. His description was quite vivid and tallied with that of the old men who had seen the bodies at the tea factory. He simply said the creature was a 'Nyanau', a wild animal, but it was not a 'fisi' or hyaena and he was most indignant when we suggested it could have been a baboon or pig. He knew the latter well as they destroyed his maize. He had never seen a 'Nyangau' before. Asked what would be the reaction of dogs he replied that they would certainly not go near the creatures. Where did it live in the forest and what did it feed on ? "Oh, stray cattle, sheep and goats". His imagination was running away with him but he stuck to his story of the creature walking round his hut.

When the creature was first reported Ken Archer was shown a foot print which he photographed. This had been obliterated by rain at the time of my visit, so we have to await the photograph.

Hyaenas used to be numerous in the past but with the development of tea gardens much of the forest has disappeared and below the escarpment there is a vast sea of sugar cane. A good hyaena environment no longer exists while additionally today there is little food to sustain a population of this animal. The local people and many club members of the Nandi Hills Club say they have not seen hyaena for many years though they used to be fairly common. Baboon and wild pigs frequent the escarpment bust but it is certain that in a few years to come they too will disappear from the area.

I sum up my investigation as "the snark was a bujum" and I can only think that the 'Yangau' was simply a hyaena, one of the few left in the district while there is no such thing as a Giant Forest Hyaena.

G.R. Cunningham van Someren, P.O. Box 40658, NAIROBI

HAWKMOTHS IN MY GARDEN

During the week of 11th May, 1981, it rained in Nairobi nearly every day in the late afternoon and into the early evening, culminating in the spectacular storm of 14th May.

On 15th May, it did not rain in the late afternoon, and at dusk I walked down the garden to smell an orchid, *Aerangis brachycarpa* (*A. flabellifolia* of *Upland Kenya Wild Flowers*), which was flowering. Both *Areangis brachycarpa* and *Aerangis confusa* (*A. brachycarpa* of U.K.W.F.) are strongly scented at night. *A. brachycarpa* has a rich, spicy, peppery frangance, reminiscent of *Crinum macowanii* (*C. kirkii* of U.K.W.F.) while *confusa* has an overpowering sweet, almost jasmine-like fragrance.

As I leaned forward to smell the orchid, a hawk moth brushed past my face, cast its proboscis towards the orchid flower several times, finally found the opening, uncoiled its long proboscis, and drank the nectar deep in the orchid spur.

I called my family, and as we watched, a hawk moth flew past us, made several tries at the orchid again, succeeded, and drank.

A little later in the evening, we looked out over the varandah, where the light from the house illuminated part of the flowering *Iochroma* bush. *Iochroma* has long tubular purple or pink flowers and is extremely popular with sunbirds.

That night over twenty hawk moths were flying around the bush, drinking the nectar in the flowers. The hawk moths' large eyes glowed brilliant orange in the light from the house. They fed in a frenzy, casting their proboscis until it entered the flower, hovering as they drank.

Hawk moths continued feeding on the bush for several hours that night. The following night they also came to the bush, but not in such numbers.

Both birds and hawk moths feed on *Iochroma*, but I have only seen one bird, an Amethyst Sunbird, *Nectarinia amethystina* once drink nectar from an *Aerangis* orchid.

Fleur Ng'weno, P.O. Box 42271, NAIROBI

A BRIEF GUIDE TO PLANT NAMES

PART 1

As East African plants rarely have English names, the following short guide may be of interest to non-latin scholars, not only as an aid to remembering plant names, but to add interest when plants are identified.

Scientific names of plants normally consist of two parts, the generic name, applying to several botanically similar plants, and a specific name applying to one plant only. They are of latin or greek origin. The generic name may be a direct translation, *eg* *Citrus* is the latin name for a lemon tree. It may be a direct translation of a feature of the plant, *eg* *Crotalaria* means baby's rattle (the seed pods) and *Gladiolus* means short sword (the leaves). Or it may be a latinised version of someone's name, *eg* *Dahlia* after Dr Dahl, sometimes these sound very artificial, for instance *Eschscholtzia* !

The specific name is usually descriptive of some part of the plant, *eg* alba - white; repens - creeping; pulchra - beautiful; bulbifera - bearing bulbs. It may indicate the original home of the plant, for instance, sinensis - of China; mexicana - from Mexico, or the person who discovered it - stolzii.

The generic name is written with a capital letter while the specific name always starts with a small letter even if it is someone's name. The different endings are unimportant to us, but they must agree with each other, *eg* Euphorbi*a* hirt*a*, Cyper*us* esculent*us*. The endings -1, of; - ana, from; iensis, of; show that a plant is named for a certain person (hildebrandtii), or comes from a certain country (africana, senegalensis). The endings - ens, -ans mean - ing, *eg* natans - floating; - oides mean like, *eg* jasminoides - like jasmine; - fera meaning bearing *eg* spinifera - bearing spines; - escens means becoming, hence incana - grey; incanescens - becoming grey.

Below are the meanings of some common generic and specific names :

GENERIC NAMES Many of the older generic names are of Greek origin (other languages indicated)

Acacia - from Akakia -'Egyptian thorn' - *Acacia arabica*

Acanthus - akantha = a prickle or (more likely) ake = a point, anthos = a flower

Ageratum - a = not, geros = old (flowers do not seem to fade *ie* get old)

Agrostis - from Agrostis (grass)

Allamanda - after Dr Allamand of Leyden who sent seeds of this plant to Linnaeus

Amaranthus - a = not, maraino = to fade (inflorescence keeps it's colour)

Bauhin - after the twin Bauhin brothers (the leaves formed from pairs of leaflets fused together)

Bidens - bi = 2, dens = teeth (Latin) (Fruits has pappus of 2 teeth)

Bougainvillea - after de Bougainville, a French explorer

Bryophyllum - bryo = to sprout, phyllos = leaf (plantlets form on leaves)

Cassia - from Kasian (Cassia)

Cocos - coco = monkey (Portuguese) from likeness of end of nut to monkey's head

Commelina - after the Commelin brothers (flowers have 2 large petals: J and K Commelin, famous Dutch botanists, and 1 small one, a 3rd brother who died young)

Crotalaria - korotalon = castanet or rattle (seed pod rattle)

Cynoglossum - kyno = dog, glossa = tongue

Cyperus - from Kypeiros (sedge)

Eragrostis - eros = love, agrostis = grass

Erigeron - eri = early, genos = old (refers to grey appearance)

Euphorbia - after Euphorbus, Physician to Juba, King of Mouritania, also eu = well, phorbus = fed (refers to succulent habit)

Gnaphalium - gnaphalion = wooly (appearance of plant)

Helichrysum - helios = sun, chrysos = gold (some with golden yellow flowers)

Lepidium - lepis = scale (shape of fruits)

Oxalis - oxis = acid (taste of plant)

Polygonum - poly = many, gonos = small joints (form of stem)

Salvis - salvo = to heal (Latin) - some species esteemed as medicinal plants

Vernonia - after W. Vernon, an English botanist who travelled in North America

SPECIFIC NAMES

Colours

concolor	- one coloured
bicolor	- two coloured
tricolor	- Three coloured
carnea	- flesh coloured
coccinea	- scarlet
fulgens	- glowing red
rose -a	- rose coloured
rubra	- red
sanguinea	- blood red
alba	- white
candida	- white
canescens	- grey
incana	- grey
glauca	- blue grey
nigra	- black
azurea	- blue
caerulea	- bark blue
coelestris	- sky blue
aurantiaca	- orange
flavida	- pale yellow
chrysantha	- golden
fulva	- tawny
lutea	- yellow

Countries

abyssinica	- from Abyssinia
aethiopica	- from the Ethiopian Region
africana	- from Africa

Countries cont.

americana	- from America
arabica	- from Arabia
bonariensis	- from Bonaria
indica	- from India
keniensis	- from Kenya
mexicana	- from Mexico
sinensis	- from China

Folia and Phylla - Leaf

unifolia	- 1 leaved
monophylla	- 1 leaved
bifolia	- 2 leaved
biphylla	- 2 leaved
trifolia	- 3 leaved
triphylla	- 3 leaved
quadrifolia	- 4 leaved
quinquefolia	- 5 leaved
hexiphylla	- 6 leaved
polyphylla	- many leaved
polyfolia	- many leaved
alternifolia	- alternate leaves
augustifolia	- narrow leaves
brachyphylla	- short leaved
cordifolia	- heartshaped leaves
heterophylla	- various shaped leaves

latifolia	- broad leaves
longifolia	- long leaves
macrophylla	- large leaves
microphylla	- small leaves
obliquifolia	- uneven sided leaves
obtusifolia	- blunt leaves
oppositifolia	- opposite leaves
rigidifolia	- stiff leaves
rotundifolia	- round leaves
simplicifolia	- simple leaves

Flora - Flowers

uniflora	- one flowered
biflora	- two flowered
triflora	- three flowered
floribunda	- abundant flowered
grandiflora	- large flowered
longiflora	- long flowered
miltiflora	- many flowered
nudiflora	- bare flowered (without leaves)
parviflora	- small flowered
pauciflora	- few flowered
viridiflora	- green flowered

(This article will be completed in the next issue of the Bulletin. Ed.)

Mrs R.A. Nicholson, P.O. Box 259, MBEYA, Tanzania

A LORANTHUS AND IT'S BIRDS

One of the better examples of plant-bird symbiosis can be seen in many Nairobi gardens. Moreover, the plant concerned does not exploit just one group of birds but used two quite seperate stages.

The plant concerned is the "mistletoe" Erianthemum ulugurense (Loranthus ulugurense in Agnew, Upland Kenya Wild Flowers) which parasitises a wide range of trees and shrubs. It is actually a hemi-parasite as it still photosynthesizes for itself and only needs water and minerals from the host. True parasites depend on their hosts for everything. It can be easily recognised in Nairobi as it is the only Loranthus with slender, hairy, pale yellowish green and orange flowers. Other species occur outside the Kenya highlands but they always have flowers differing only slightly in size and proportions making the genus very easy to identify.

Erianthemum is strictly speaking not a mistletoe as many botanists now believe that the similarities between the true mistletoes, Viscum and allied genera with inconspicuous unisexual flowers and Loranthus and its segregates, including Erianthemum, with brightly coloured hermaphrodite flowers are due more to convergance in life styles than true kinship. This convergeance is particularly striking and perhaps most easily explained in the fruits which are brightly coloured, (red in the case of Erianthemum) single seeded and fleshy with a very characteristic sticky layer of 'viscin' surrounding the seed. The theory, and practice, of these fruits is that birds eat the outer layer but reject the inedible seeds. This is not easily done because of the very sticky viscin which tends to fasten the seeds to the bird's beak and so to rid itself of the unwanted seed, the bird wipes it's beak on the nearest bit of twig, so attaching the seed there. Such an arrangement is ideal for a plant parasitizing the upper parts of trees and shrubs as the seed can now germinate and invade the host tissue directly. As both Viscum and the loranthoids are aerial parasites, it is not surprising that both groups have such similar fruits. A wide range of birds probably partake of these tempting fruits but one group, the Tinkerbirds, stand out as specialists mistletoe-berry eaters and are always likely to be seen near fruiting plants.

True mistletoes only depend on birds for the distribution of their seeds but *Erianthemum*, and probably most if not all other loranthoids, have another symbiotic relationship with other groups of birds feeding not on the fruits, but on nectar from the flowers. In the case of *Erianthemum* a wide range of sunbirds are involved; at Lavington particularly the Bronze, *Nectarinia kilimensis*, Scarlet-chested, *N. senegalensis* and Golden-winged, *N. reichenowi*. We realised this when on one day we noticed that there was an incredible racket of sunbirds just the other side of our hedge which we traced to some *Bauhinia purperea* (Camel's Foot) trees very heavily infested with *Erianthemum*. This was in full flower and was attracting vast numbers of these sunbirds which were getting most excited. We have also seen smaller sunbirds, such as the Variable, *N. vensuta*, Amethyst, *N. amethystina*, Beautiful, *N. pulchella* and both the Eastern, *N. mediocris* and Northern Double-collared, *N. preussi* but those are not as numerous as the bigger ones and not so obviously concentrating on the *Erianthemum*. The Golden-winged has only been seen in any numbers when the *Erianthemum* is in full bloom.

At first we had to depend on our neighbours plants but then some seedlings appeared on the hibiscus in front of our varandah. Efficient gardeners recommend that one removes such parasites from trees and shrubs in the garden as infections tend (not surprisingly) to be contagious and can easily end up severely damaging the host. However, the prospect of tinkerbirds and Golden-winged Sunbirds just outside the window was tempting enough to help us ignore such advise and the *Erianthemum* continues it's take-over bid. It works to. We do get sunbirds visiting. The other advantage is that we were able to observe the flowers more closely and find out how they work.

Pollination is by means of a quite spectacular 'trip mechanism'. Young buds are very slender and uniformly pale green but as they mature the basal two fifths turn orange and, if one looks closely, maturity is indicated by the corolla lobes starting to seperate at the base but not at the tip. The actual opening of the flowers needs a high speed camera to show the details! All I can say is that if one now prods into the narrow spaces between the corolla lobes there is a sudden puff of pale yellow pollen and the corolla lobes are reflexed back, just like that, much too fast to see. In fact the movement is so violent that the anthers are broken off and flung away in a shower of pollen that coats the hand (or sunbird). The anthers, if you can find them, are tightly coiled into a spiral. Rapid movement into this position must play a large part in dispersing the pollen onto the vector. At the same time the style bends over at about right angles so as to rub against the next pollen-covered sunbird to visit the inflorescence.

Mike Gilbert, Herbarium, P.O. Box 45166, NAIROBI

BACK YARD BIRDS: BANDERA LANE, NAIROBI

In 1980 the rains came late, but when they came they made up for lost time and within a week the parched earth of April had metamorphised into a deep lake, and with the lake the water birds moved in. I had no idea of the intense activity that was to take place and did not keep diary notes.

Five Hadadas, *Bostrychia hagedash*, had been quartering the lawn before the rains began so they were already in residence when the bonanza began. First to arrive was a pair of Little Grebes, *Tachybaptus ruficollis*, and their urgent nest building accompanied by ecstatic trilling; prelude to the more secrative days of raising one small chick, provided background music for the sodden days. Nights were filled with the appalling deep base of the *Bufo gutteralis* - was ever a toad better named - later accompanied by a shrill frog chorus. *Bufo gutteralis*' came hopping over the lawn carrying their mates piggy-back. In the interests of science we tried to prise a male off a female's back but couldn't get him to release his strangle-like hold.

Two Black-headed Herons, *Ardea melanocephala*, balanced precariously on the *Cordia* branches, or sat motionless for hours on the fence, peering into the rising waters. Then, treading most delicately scarcely raising a ripple, rapier bill poised beadly accurate for the kill, they struck and occasionally I saw the yellow bellies of doomed frogs, legs kicking, before they were tossed down the slender throat. A pair of Squacco Herons, *Ardeola ralloides*, were also early arrivals and they dazzled us with their white-winged flight, disappearing from sight as they landed, folding their wings to become self-effacing brown birds. The Hammerkops, *Scopus umbretta*, came and went and were mostly morning visitors, but as the lake dwindled to an oozing swamp, seething with tadpoles, four returned with three young and gorged themselves on the pickings.

A pair of enchanting Lesser Moorhens, *Gallinula angulata*, spent a couple of months making the most of backyard conditions, dabbling around in the shallows, quite fearless and eventually becoming easy to view, so different from their early secrative behaviour. The bright yellow on the bill was the best give-away feature, if you knew where to look in the first place. Fleur Ng'weno was delighted to see them and said there seemed to have been a population explosion of a bird she had always regarded as fairly rare and difficult to view.

The grand finale was a late visit from a Sacred Ibis, *Threskiornis aethiopica*, who stayed on a couple of days. With the advent of this bird of ancient Egypt and the birth of one Little Grebe, I had Africa Past, Present and Future represented in my suburban backyard.

When the rains came early in April 1981, I was ready, pencil in hand, to record the activities of visiting birds and there was a completely different story to tell. The lake was three times the size it was last year, at its biggest expanse it must have covered three acres, and maybe because there was so much water around, there seemed to be less bird activity.

On 5th April, two Long-crested Eagles, Lophaetus occipitalis, arrived. The next day Hammerkops flew in, and after a bit of territorial squabbling, two decided to stay and began to build a monumental nest in the fork of an Acacia. The construction took six weeks, not counting the desultory manner in which deep 'thatching' was added to the roof. Apart from the more conventional thatching, they used two sides of an 'Omo' packet, several plastic bags, one bright blue, and pieces of newspaper, one of which could have been Fleur Ng'weno's article on bird watching ! On 30th April a Brown Snake Eagle, Circaetus cinereus, took a bath in the shallows, with a Hammerkop on either side making aggressive passes at him, until he flew up into a gumtree and sat there preening, the Long-crested Eagle meanwhile keeping an eagle-eye on the proceedings. The Hammerkops spent a lot of time in the shallows, stirring it up (like some people I have met in Nairobi). The pattern was, walk, walk; stir, stir; gobble, gobble. Then their behaviour changed overnight, in fact I thought they had deserted their nest, until I caught rare glimpses of them.

On 8th April, two Black-headed Herons arrived, and one stayed until the end of July. On 15th April, two Little Grebes were seen, one in non-breeding plumage, but by 21st both were sporting full colours. On 15th May, they chased off a female Lesser Moorhen. On the 16th, tragedy struck. One of the Grebes was having what I thought was an excessively splashy bath, wings thrashing and water bubbling, but about 10 minutes later one was floating upside down, while the victor hurried off to join a third waiting at some distance. Their nesting activities followed a similar pattern to the previous year - at first conspicuous and vocal and then quiet and elusive. On 22nd June, one fledgling was seen riding on its parent's back. The next day, three young were sighted climbing on to the adult's back from the tail-end, the third had a lot of trouble finding a place and kept falling off. Three Black Kites, Milvus migrans, who live in the area, started to sweep over the water at this stage, and my last viewing of the Grebes was five days later on 28th June.

On 1st May a Squacco Heron dropped in but did not stay. In July, however, one took up residence as the water decreased and the tadpole density increased. The Hadadas only came home at night to roost, their dulcet calls mingling, at times, with those of eight hornbills making the most of the ripening figs and avacado pears - what a cacophony of sound.

On 28th May, two Red-billed Teal, Anas erythrorhynchos, dabbled in the shallows. They spent a couple of nights, until they were chased off by next door's Dalmation.

The shallow extended lake dried up fast, and the deep end only was left by the end of May. Pale blue water lilies had appeared and the sedge is as tall as I as I sit in my garden waiting hopefully for the appearance of a Hammerkop family.

Mrs D. Brass, P.O. Box 59196, NAIROBI

"THINGS ARE PRETTY DULL BIRDWISE THESE DAYS"

"These days" of January 1981, are hot, dry and dusty in the Kerio Valley, near Kimwarer, Kenya. The sun blazes down from a cloudless sky. The October/November rains have failed completely. There is not a single blade of grass visible under the acacia trees, the foliage of which is thinner than ever. There is not even a carpet of fallen leaves. Such as do reach the ground are devoured by the ubiquitous goats. The few cattle move as if they were too tired to put one foot in front of the other. The birds have postponed breeding. No immatures have been seen for a full three weeks this January. Bird song is muted.

A pretty dull time for a birding holiday ? But is it ? We decided to try a 'bird sit', and wrote down every single activity that came to our notice - and this was what we found.

Our selected area was in a patch of acacia woodland. Our field of view was 90° and the depth of view was about 80 metres. We are 1250 m above sea level, on a dry, warm, gusty evening. The sun was already fairly low over the west wall of the valley. We sat in the shadow of the largest acacia of a group and watched :

17.24 hrs The Silverbird, Empidornis semipartitus, right in front of us continued studying the ground carefully whilst a Grey-headed Social Weaver, Pseudonigrita arnaudi, hopped rapidly across below. A White-bellied Go-Away Bird, Corythaixoides leucogaster, called.

17.25 hrs Over to the left there was movement where an Abyssinian Scimitar Bill, Phoeniculus minor, worked his way through the rounh bark of one of the few non-acacia species present.

17.26 hrs A pair of Pale Flycatchers, Bradornis pallidus, has moved in to work the insects over to the right. Silverbird is seldom still for long, and has moved out of sight, with the curious unobtrusiveness that is characteristic - here one moment and gone the next.

17.28 hrs The Grey-headed Social Weaver has been joined by two more, and they are feeding on termites, which quickly find any fallen twig. A small herd of unattended goats appears, making the evening hideous with an almost human bleat. It is hardly their fault, but they must contribute considerably to the awful erosion in these parts.

17.30 hrs More activity is going on. A Drongo, Dicrurus adsimilis, (or is it the Southern Black Flycatcher, Melaenornis pammelaina ?) is active in the furthest right hand corner of our area, and a pair of Chin-spot Batis, Batis molitor, are searching the foliage of the tree recently vacated by the Scimitar Bill, and a Brubru, Nilaus afer, its russet flanks bright in the evening sun, is hunting nearby.

17.31 hrs A medium sized bird flies swiftly, not identified, to remind us how few we really know.

17.32 hrs Silverbird is back, and preening briefly before continuing to feed. Against the dark bark, and with the sun on him - which he allows only when the sun is low - his silver and chestnut are very striking. Generally he seems to prefer to perch in the shade.

17.33 hrs A second Silverbill appears, and together they fly across our front, low down over the bare earth, sweeping up to seperate perches away over to the left.

17.35 hrs The Black Flycatcher is more prominent now that the sun is low, and shining through its outstretched wings as it darts to and fro after insects.

17.36 hrs There is a small collection of twigs high in a nearby tree over to the right. On several days this week a Pale Chanting Goshawk, Melierax poliopterus, has been seen flying over in this direction. Can we put two and two together, even though he has not actually been seen in the tree. It seems a possibility.

17.38 hrs In the same tree there is movement. A cock Grey Woodpecker, Mesopicos goertae, is moving jerkily upwards. A White-bellied Tit, Parus albiventris, seems to fall out of the tree and flies away.

17.39 hrs The goat is now almost unbearable, but, fortunately, is disturbing only us.

17.40 hrs The Scimitar Bill, having completed his search of one tree, now drops and makes off to the left. The Chin-spot Batis are "chuck-chuck-chucking" nearby. How few bird watchers seem to know his variety of calls !

17.42 hrs The Black Flycatcher now singing and thus identified as the Southern Black. Quite a sweet, sibilant call, very different from the coarser calls of the Drongo.

17.43 hrs A Black-headed Oriole, Oriolus larvatus, calling loudly, but the goats are really impossible now, and so, risking the disturbance, we chased them well away. The birds took almost no notice !

17.45 hrs A Laughing Dove, Streptopelia senegalensis, flies in and busily struts about, feeding in a patch of evening sunlight.

17.46 hrs The Grey-headed Social Weavers suddenly, and for no apparent reason, take off with loud calls, but they will certainly be back to their two-entrance grass nests nearby.

17.47 hrs We are regretting not having brought the anti-midge cream, as small black flies seem determined to get into our eyes, even when the glasses are up. Do they wish to feed, or breed, or what ?

17.48 hrs A weak, plaintive little song, of unknown origin - perhaps the Southern Black Flycatcher again.

17.49 hrs A Southern Black Flycatcher suddenly and unhesitatingly displaces the Silverbird from a foraging area, and this apparently gently-disposed bird flies gracefully away.

17.50 hrs More unidentified birds overhead.

17.51 hrs Oriole calling again.

17.52 hrs Blue-naped Mousebird, Urocolius macrourus, heard but not seen.

17.53 hrs A barbet, possibly the Red-fronted, Lybius diadematum, which is feeding young in a nest-hole not far away, calls and is answered.

17.54 hrs The Southern Black Flycatcher is close now, and a pair of d'Arnaud's Barbets, *Trachyphoneus darnaudii*, start up their duet; to be followed by another pair behind us until the whole area seems filled with their calling.

17.55 hrs A very handsome cock Violet-backed Starling, *Cinnyricinclus leucogaster*, swings silently in. The Silverbird is back on his high perch to our right but moves out as soon as the starling arrives.

17.57 hrs The Violet-backed Starling leaves hurriedly, its back changing into scarlet by the different angle of the sun.

17.59 hrs Grey-headed Social Weavers back again, as anticipated.

18.00 hrs Silverbird back again. Interesting how seldom he returns to the post he has just left, but always flies low away, to swoop silently and unobtrusively upwards to another perch. He does, however, retain certain favourite perches, as evidenced by the considerable accumulation of droppings under all such.

18.02 hrs Sun now very low, and all colours look warmest.

18.04 hrs Slate-coloured Boubou, *Laniarius funebris*, calling but not in sight.

18.05 hrs Laughing Dove now near enough for us to distinguish the blue markings on his neck. A Go-Away Bird calls.

18.07 hrs Silverbird down and up again.

18.09 hrs A pair of Von der Decken's Hornbills, *Tockus deckeni*, have flown in at the periphery.

18.10 hrs Brown Parrots, *Poicephalus meyeri*, calling loudly, but out of sight.

18.11 hrs Silverbird has made three sorties since 18.07 hrs. This is pretty fast feeding.

18.12 hrs General alarm again, with all birds suddenly dropping out of sight or taking flight, but no obvious cause.

18.14 hrs Von der Decken's Hornbill moving away again, just remaining within sight and starting to feed on the ground, tossing material collected into their bills before swallowing.

18.15 hrs Sun leaves the area, but activity continues.

18.18 hrs Red and Yellow Barbet, *Trachyphonus erythrocephalus*, flies across our front to land on the stem of the only candelabra tree, where he hangs and pecks at insects, perhaps termites from a dead branch.

18.19 hrs Cock Violet-backed Starling back again. They seem to cover big distances each day, flighting up to the walls of the valley in the morning, to feed, and sweeping down to the valley floor in the evening to roost there in the warmth, four thousand feet below.

19.20 hrs Von der Decken's Hornbill still feeding steadily and silently in the same place.

19.21 hrs Ruppell's Long-tailed Glossy Starling, *Lamprotornis purpuropterus*, sweeps in and starts strutting about on the bare ground. Evening calls from the Go Away Bird, and the air is now very still, the wind having died down. Every least movement in thinly foliaged trees is now clearly seen.

19.23 hrs Green Pigeon, Treron australis, calls. He is effectively named "Turiki" by the Kikuyu people.

19.24 hrs Our hour ends with the Violet-backed Starling in full view, the Go Away Bird calling, and the Southern Black Flycatcher still feeding. Poor light makes further identifications impossible, but who could possibly say that "Things are pretty dull birdwise" !

Geoffrey & Dorothy Irvine, P.O. Box 35, CHOROGIA, Kenya

REQUESTS FOR INFORMATION

1) Will any members with records for Kenya of the Somali Sparrow, Passer castanopterus, and/or the Compact Weaver, Ploceus superciliosus, please send them to Adrian LeWis, Geology Department, P.O. Box 30197, Nairobi for use in a summary paper. All data will be acknowledged.

2) The Oxford Ethological Expedition would be grateful for any information on the Egyptian Vulture, Neophron percnopterus, the subject of their study.

Please send any distribution data and any records of egg-breaking behaviour of this bird to the Oxford Ethological Expedition, c/o G.R. Cunningham van Someren, Section of Ornithology, P.O. Box 40658, Nairobi. If possible, please specify the date, time, place, age of bird, any accompanying species (especially the Hooded Vulture) and whether or not egg breaking was successful.

3) A colour ringing and colour-dyeing programme is being carried out this year on the breeding White-cheeked Terns, Sterna repressa, of the State of Bahrain.
Colour Ringing Up to 500 birds will be colour ringed with a yellow celluloid ring on the right leg and a numbered BTO monel ring on the left leg. The yellow colour ring tends to fade to white with age. The majority of these birds will be hatched this summer but a few adult birds will also be colour ringed.
Colour Dyeing Adult and newly fledged birds will be colour dyed this summer in an attempt to discover movements within Bahrain and also migrational routes and destinations. All colour dyed birds will also be ringed.

I will be very grateful for records of sightings of any colour ringed or colour-dyed White-cheeked Terns. All replies will be acknowledged.

T.J. Hallam, Awali, P.O. Box 25171, BAHRAIN, Arabian Gulf

SOCIETY NOTES

BOOKS The following books are available to members from the Society's office in the National Museum :

Birds of Africa autographed copies by our Chairman, John Karmali, Shs 225/-.

Birds of East Africa P.L. Britton (ed.), Shs 130/-.

Breeding Seasons of East African Birds Brown and Britton - Shs 80/-.

Check-list of the Birds of Kenya - Shs 10/-.

Field Guide to the Mammals of Africa including Madagascar T. Haltenorth and H. Diller. One copy only - Shs 150/-.

Useful and Ornamental Plants of Zanzibar and Pemba by R.O. Williams (1949). Eleven copies have just been received, having been stored in Zanzibar for years. All are foxed and have rather battered dust covers, but we are told these are the last copies in print. Shs 80/-.

Bundu Book 1 (Trees, Flowers and Grasses) Shs 35/-

Bundu Book 2 (Birds, Insects and Snakes) Shs 35/-

Butterflies of Rhodesia Shs 40/-

Some Well Known African Moths Shs 45/-

Common Trees of the Highveld Shs 30/-

Flowers of the Veld Shs 30/-

Birds of the Lowveld Shs 40/-

Gardening in East Africa A.J. Jex-Blake (ed.) Third edition, 1950. One copy in good condition - Shs 150/-

BOOK NOT AVAILABLE Williams, Field Guide to the Birds of East Africa. No bulk supplies have been received by our distributors and we understand that the book is out of print. A second edition is said to be on the presses and hopefully will be here shortly. Our sincere apologies to members who have placed orders.

MEMBERSHIP Please remember that membership is only Shs 35/- from July to December with many interesting trips and lectures planned. Please tell your friends about the Society and make them join.

OFFICE MOVE It now seems likely that the Society's office will be moving late in October - as mentioned in the previous Bulletin, help will be needed when the move is on - our thanks to those who have already offered.

REPRINTS A reminder that many useful and interesting reprints from our Journal are available in the office. A list of those available can be obtained from the Secretary.

NEST RECORD SCHEME - NEW ADDRESS Members are reminded that the new address for the Nest Record Scheme is : Mr Barry Taylor. P.O. Box 87336, MOMBASA. Nest record cards are available from the Secretary - free of charge.

LECTURES It has come to our attention that one or two members make a point of asking questions in the middle of a lecture. Not only if this disturbing for others listening, it is most impolite to the lecturer. Time is always given at the end for questions - please save them until the correct time.

MUSEUM ON THE MOVE ! At the time of writing the Ornithology Section is in the process of moving into the new Division of Natural Sciences building. Members who visit the Bird Room will now have to see Mr van Someren in his new quarters. The rest of the Sections (Mammalogy, Herpetology and Entomology) will be moving over the next few months.

WEDNESDAY MORNING BIRD WALKS Members are reminded that the Society has a bird walk within the Nairobi area every Wednesday morning under the leadership of Mrs Fleur Ng'weno. Please meet at the National Museum at 8.45 hrs, rain or shine.

PRISCILLA ALLEN Up-country members may wish to know that the Society's previous Secretary and Librarian, Priscilla Allen was attacked on 2nd August at her home in Nairobi. She sustained a broken hip and is in Nairobi Hospital. Progress is good and we hope that she will be out of hospital in the next week or so. We wish her a quick recovery.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

J. Martin Airey, P.O. Box 67363, NAIROBI
Mr J.M.S. Caldwell, P.O. Box 50, RUMURUTI, Kenya
Mr Stephan Conger, P.O. Box 31359, NAIROBI
Hilary M. Dobson, P.O. Box 67363, NAIROBI
Mr P.A.G. Field, P.O. Box 159, NANYUKI, Kenya
Mr G.K. Gibbs, P.O. Box 40588, NAIROBI
Mr Michael Gore, First Secretary, British High Commission, P.O. Box 48543, NAIROBI
Erika Gorton, P.O. Box 29231, KABETE, Nairobi
Mrs P. Heasman, P.O. Box 18582, NAIROBI
Mr Dennis Herlocker, P.O. Box 30592, NAIROBI
Mr Peter Impara, St Patricks H.S., Iten, P.O. ITEN, via Eldoret, Kenya
Mr and Mrs A.L. Martin, P.O. Box 30465, NAIROBI
Ms Betti Mburu, Forest Dept., P.O. Box 30513, NAIROBI
Mr Ben Mbau Musyoki, P.O. Box 36, MARIAKANI, via Mombasa
Mrs Maimuna Nomani, P.O. Box 10682, NAIROBI
Mr M.G. Prettejohn, Sangare Ranch, P.O. Box 24, MWEIGA, Kenya
Mr Bimal Sarkar, P.O. Box 48386, NAIROBI
Mr Prakash O. Shah, P.O. Box 80877, NAIROBI
Mrs Pilly Turner, P.O. Box 40440, NAIROBI
Miss Susan Turner, P.O. Box 52435, NAIROBI
Dr Helga Vogler, P.O. Box 29231, KABETE, Nairobi
Dr W.M. Watkins, Dept. Pharmacy, Faculty of Medicine, P.O. Box 30197, NAIROBI
Miss Diana Williams, Nairobi Academy, P.O. Box 24817, NAIROBI
Mrs D. Wride, P.O. Box 41033, NAIROBI

Local Junior Member

D.P. Muriithi, Tana House, Nairobi School, P.O. Box 30047, NAIROBI

Overseas Full Members

Mr John Harriman, 11 Lodge Road, Scunthorpe, South Humberside, England
Carl Chr. Kinze, Tagens Vej 15, DK 2200 COPENHAGEN N, Denmark
Hiroyuki Kudo, 1-9-18 Funabashi, Setagaya - ku, TOKYO, Japan

SOCIETY FUNCTIONS

Monday 14th September 1981 in the Museum Hall, Nairobi at 5.30 p.m. Mr Richard Leakey will give another of his popular lectures on prehistory.

(Friday 18th) Saturday 19th/Sunday 20th September 1981 A camp in the Bissel area on the Athi River/Namanga road, led by Mr Peter Johnston and junior members from Nairobi School. Those who have completed the camp slip will be sent details shortly.

Saturday 26th September 1981 A 'dudu crawl' with a difference, led as usual by Mike Clifton, Entomologist at the National Museum. Please meet at the National Museum at 6 p.m.; from here Mr Clifton will demonstrate, in the Museum grounds, the different techniques of catching insects at night. Please bring warm clothing.

Monday 12th October 1981 in the Museum Hall, Nairobi at 5.30 p.m. The film 'Mysteries of the Green Mountain' kindly loaned by Wildlife Clubs of Kenya.

Saturday 17th/Sunday 18th/Monday 19th October 1981 Weekend trip to Mara Buffalo Camp. For full details please see the July/August 1981 Bulletin

Late November or Early December Forth Annual Nairobi Bird Census. The date has to be finalised - please watch this page for details as we hope to have another successful census.

Sunday 6th December 1981 Dr Adrian Lewis of the Geology Department, University of Nairobi, will lead an evening trip to Hell's Gate, Naivasha for geology and birds. Details in the November/December Bulletin.

(Friday 11th) Saturday 12th/Sunday 13th December 1981 Weekend trip to Saiwa Swamp, home of the Sitatunga and many interesting bird species, by kind invitation of Mr and Mrs Barnley. Full details will be printed in the November/December 1981 Bulletin.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Mr. S.G. Njuguna, Dr. D.J. Pearson.
Co-opted Members: Mrs. H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Dr. A. Hill, Dr. F. Owino.
Journal Editorial Sub-Committee : Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas.
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, P.L. Britton, Mrs. H.A. Britton, P.B. Taylor, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee : (Society representatives) Prof. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee : Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SI
NH

E A N H S

BULLETIN

SMITHSONIAN
R 1
LIBRARIES

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

CONTENTS

Field Identification of the Genus Cisticola (Aves) in Kenya : Part 1 .. 108
Fiscal Shrike Kills Prey by Impaling it on Thorn.. 115
Grey Hornbills Accompanying Olive Baboons .. 115
A Brief Guide to Plant Names : Part 2 .. 115
Possible Solution to the Salvinia Problem? .. 117
Camp at Maparasha Hills, Bissel .. 117

Book Reviews :

Cradle of Mankind .. 118
The Legendary Grogan.. 119
Requests for Information .. 120
Wanted .. 122
For Sale .. 122
Very Important Functions Notice .. 122
Society Notes.. 123
New Members .. 125
Society Functions .. 125

FIELD IDENTIFICATION OF THE GENUS CISTICOLA (AVES) IN KENYA: PART 1

The genus Cisticola is one of the most daunting groups to the birdwatcher in Kenya and, as such, is often put aside until most of the other birds are known, or is forgotten altogether. But whereas other difficult bird groups keep a low profile, the Nightjars at night, the Illadopses skulking near the forest floor with the Greenbuls hidden in the foliage above them, the Cisticolas are often uncomfortably prominent, singing or sitting out on open perches, frequently in full view.

But field identification of these classic "small brown birds", at least in Kenya, appears easier than first impressions suggest, and this and subsequent papers outline a simple three-fold classification for this purpose. Full english and latin names are given at the initial mention of each species, while further mentions quote the capitalized english names; all nomenclature follows Britton (1980).

The genus

The genus Cisticola contains insectivorous Warblers (Aves, Sylviidae) that live in areas with grass, which they use to build their nests. While being ubiquitous to grass, their actual habitats can vary from grassland, to marshes and woodland, and even rocky areas.

The genus contains 41 species, of which 39 are endemic to sub-Saharan Africa, ie the Afrotropical avifaunal region (Gruson, 1976; Britton, 1980). One species occurs only in the Far East and Australasia, while the other, the Zitting C. juncidis, inhabits Africa, the Far East and Australasia, and reaches the southern fringe of Europe (where it is called the Fan-tailed Warbler), east to China (Gruson, 1976).

Sources of Information

I have found the two most useful reference books to be Mackworth-Praed & Grant (1960) and Britton (1980). The former deals with each East African species in terms of appearance, racial variation, behaviour, habitats etc, while the latter gives up to date information on distribution and nomenclature. Having acknowledged these volumes as essential references, and having widely extracted material from them throughout these accounts, I shall refer to them again only sparingly for reasons of space.

The fundamental authority on the genus is Lynes' two volume Ibis supplement "Review of the genus Cisticola" (1930). This contains an enormous amount of detail relevant to field identification, as well as a wealth of other no less intriguing Cisticolana. Mackworth-Praed & Grant (1960) provides more speedy and convenient access of the important facts, but Lynes is well worth reading if time allows. It should be noted that many of Lynes' illustrations depict races from other parts of Africa that differ substantially from those found here.

Williams (1963,1967) considers only 13 of the 27 species that occur in Kenya, and thus is of limited use for identification. Williams & Arlott (1980) mentions 23 species and is a distinct improvement over the earlier volumes, but still does not provide sufficient information.

Away from reference books, sources are as follows. The skin collection in the Department of Ornithology at the National

Museum, Nairobi, is most helpful, although fading of the specimens with age must be taken into account. My thanks go to G.R. Cunningham-van Someren, Curator of Ornithology, for access to this collection and to various reference texts. I would also like to acknowledge use of an unpublished field key to certain of the Cisticolas, compiled by G.R. Cunningham-van Someren and Prof. D.E. Pomeroy. D.J. Pearson criticised earlier drafts of these papers, and was the source of much useful information and discussion, particularly in the field.

Finally, I have field experience of 20 of these species, from Kenya, Rwanda and France.

Limitations and Scope

I'm certainly not an expert on these birds, so that I may well misinterpret or simply miss useful points. Additional information, particularly on field marks, is most welcome and *all correspondence will be answered and acknowledged*.

The papers will centre on adult birds in reasonable plumage, such that identification of every bird encountered may not be possible. Identification of the genus in Kenya is made substantially easier by the fact that most of the races that occur here do not adopt a different plumage out of the breeding season; only Winding *C. galactotes*, Black-backed *C. eximia*, Tabora *C. fulvicapilla* and Croaking *C. natalensis*, show these differences. Feather wear tends to lighten plumage colours, and this will be detailed in only a few cases. Young birds can often be detected by browner upperparts and a yellowish colouration on the ventral torso.

Localities given and races considered tend to center on the central Kenya highlands, through not wherever possible. Britton (1980) should in any case to consulted for Kenya localities.

Cisticola Fieldmarks

To be of any use at all, notes on the behaviour and appearance of any Cisticola have to be made *in the field*, preferably with the bird still in view, or at least *immediately* after its disappearance. This cannot be stressed too strongly since the differences between the various species, though distinct, are often minor. Thus to try to recall and record these subtlely detailed features at a later date can often import apparently slight variations, which in reality can produce profound identification errors.

Fieldnotes that should be taken on Cisticolas include two broad sets of data, ie that which should be taken on any unknown bird observed in the field, and that which is more specific to the Cisticola group :-

1) General Data

as much data as possible on :- location and altitude of the sighting; details of habitat, not requiring botanical knowledge further than "open grassland", or "scrub tangles in marshy hollows" etc; size of the birds (of fundamental use in the tripartite classification presented here) and any obvious size differences between apparent members of the same species (as with any type of bird, the most reliable size estimates are those relative to another, already known, species that is immediately adjacent or close to the unknown one).

Behaviour and any calls and/or song; whether the song is given from a perch or in flight.

2) Characters more Specific to Cisticolas

the following plumage details :-

a) the colour(s) of the crown, the nape and the mantle, and whether there is any colour or tone contrast between them.

b) whether there is any darker streaking on any of the three areas mentioned in (a), and the thickness of the streaks and their prominence.

c) presence of a reddish rufous to brown contrasting patch visible in the closed wing; prominence and size of this patch.

d) colour(s) of the ventral torso, and particularly any tinges or flushes on the flanks and the sides of the breast.

e) length of the tail relative to the rest of the body, and categorised for eg as long and Prinia-like, medium, short, short and stubby; general colour(s) of the tail.

f) the tail often shows a pale tip, adjacent to which there may be diffuse spots that are darker than the rest of the general tail colour; these are subterminal dark spots, and their prominence on, if possible, both the dorsal and ventral tail surfaces are important. The pale tip to the tail and adjacent subterminal dark spots are shown well on the dorsal tail surface of a SINGING Cisticola on photograph (ph.) X11 of Mackworth-Praed & Grant (1960).

Much of the above terminology (ie mantle, nape etc) is explained in standard fieldguides eg Williams (1963, p. 12) and Williams and Arlott (1980, p. 14), with particularly good sections in Roberts (1978, p. XXV111), and especially the journal "British Birds" (pp. 240-241, vol. 74, 1981).

From their appearance in the field, Cisticolas can be divided into three broad groups :-

large and unstreaked
small
large and streaked

The Large and Unstreaked Group

Seven species that can be placed here occur in Kenya but, before getting into the detailed descriptions, several general points can be made :-

1) although this group is labelled 'unstreaked', some are in fact faintly streaked. But this streaking is nothing like so bold or well defined as that of the other two groups, and in fact is often difficult to see in the field.

2) all this group sing while perched.

3) all are of medium to large size, with wing lengths ranging 53-67mm for males. This makes them around the size of the Chinspot Batis Batis molitor, ie smaller than the Rufous Sparrow Passer motitensis, and larger than the Waxbill Estrilda astrild.

4) immature/juvenile birds do not appear to be coloured yellow on the ventral torso (with the exception of the localised Whistling C. lateralis and Trilling C. woosnami).

5) tail patterns are not useful in identification.

a) SINGING CISTICOLA C. cantans

This is a good species with which to start, since it is one of the commonest and most well known of the genus in Kenya. Lynes(1930) summarises its choices of habitat well : "thick bushes and rank undergrowth, always of a soft, more or less luxuriant, and never hard or thorny nature, associated with almost any other kind of environment provided it is neither too dry, nor too wet, nor too wide open, nor too shut in among thick forest....". It occurs up to 2500 m, mainly in the central Kenya highlands, from the Kerio Valley and Meru south to Ngong and Kitui; also Siaya and Mt Elgon in western Kenya, and the Taita Hills. It is very common in gardens around Nairobi, and is very frequently recorded on the EANHS/Museum Society Wednesday morning birdwalks.

Crown darkish chestnut to rufousish brown, contrasting with the brown to grey-brown mantle; both of these areas are unstreaked. Patch of dull brown visible in the closed wing. Breast and belly can be rather dusky, leaving a rather prominent paler throat. Immatures can have very diffuse darker streaking on the mantle, but this would be difficult to see in the field.

Call very distinct and well known:- loud, far-carrying, and rendered as "Bridg-et" or "pitch-chew" , or lengthened to "pitch-chew-chee". It is easily identified by these loud and distinctive calls, but is, however, rather skulking and difficult to see in its habitat of long grass, thick undergrowth and forest edge scrub, though males can sing from prominent exposed perches.

b) RED-FACED CISTICOLA C. erythrops

This is dealt with next since it is quite similar to the SINGING in appearance and call.

In appearance, this resembles the SINGING, but with rather greyer upperparts (varying darkish slaty grey to even bluish grey) which show no contrast between the crown, the mantle and the wings. But its most obvious fieldmark is the rusty red colouration to the sides of the face, the stripe over the eye, and the forehead. The ventral torso is washed with warm buffish (rather like the underparts of the Tawny-flanked Prinia Prinia subflava), with a whiter throat. Mackworth-Praed & Grant mention the mantle as russet in the immature.

The calls, delivered from a bush or weed top, are similar to those of the SINGING, but are higher pitched and more aggressive or whip-like, including "chip-wip chip-wit chip-wip" (Mackworth-Praed & Grant), and "wheeep.....wheeep....".

It is very common in the Lake Victoria basin in western Kenya, and also ranges over the west and central highlands up to 2300 m. A skulking bird, more so than the SINGING. Habitats as SINGING, but damper and nearer water, especially in the east of its range, ie around Nairobi. In the Nature Reserve adjacent to Kenyatta University College, in June, the SINGING were up on the drier treed grass and bushland, while the RED-FACED were down amongst the thick scrub tangles of the river valley, in this case the two species not being more than 2-300 m from each other. A good Nairobi locality is the riverside vegetation of Peter Greensmith's Nurseries, near the City boundary on the C64 to Kiambu.

c) HUNTER'S CISTICOLA C. hunteri

This species, endemic to East Africa, is easily identified by three factors; Turner (1977) gives a useful summary.

Firstly, it is a high altitude bird, found from 1600-4400 m, and only above 2500 m on Mt Elgon. Thus it is very common in upland Kenya, eg Mt Kenya (extending well up into the moorlands), the Aberdares, Limuru ponds, the top of Mt Longonot etc; it just extends into the northern suberbs of Nairobi, and is common on the Tinganga coffee estate near Kiambu.

Secondly, the loud and far-carrying song is habitually given by two or more birds in duet, perched together on the top of some small bush or shrub. The overall result is a rhythmically undulating, rolling trill on the theme "tweeeee". This is one of the most common and distinct sounds of real highland habitats in Kenya.

Thirdly, while the bird at a distance appears unmarked and thus a typical member of this group, closer examination reveals quite broad but diffuse streaking of darker brown on the medium brown of the mantle; but note that this marking is nothing like so prominent as that of the streaked groups, though easily visible in good light (see Mackworth-Praed & Grant (1960) photograph (Ph.) X11, and compare with *C. galactotes* and *C. robusta* ((both of the 'large and streaked' group)) on Ph. X111).

These three features will identify the bird, but other useful information is as follows. Crown dull to quite bright chestnut-brown (thin dark streaking possibly visible), not contrasting sharply with the mantle. No noticeable rufous or brown patch in the closed wing. Ventral torso quite grey, even darkish grey, often quite prominent whitish throat. Inhabits forest glades, and edges, bamboo, giant heather, moorland; also skulks.

d) CHUBB'S CISTICOLA *C. chubbi*

The first identification point to be made here, and one which is useful for elimination purposes, is that this species is restricted to areas in Kenya west of the rift valley. It is typically at altitudes of 1700-2200 m and, on Mt Elgon, it occurs below the closely realted HUNTER'S (Britton & Sugg, 1973) with a thin zone of sympatry.

It inhabits thick bush in clearings and along forest edges and streams; common in these habitats around the Lugosida and Ikuywa rivers in Kakamega forest, and on roadside marshes along the C39 near Kaimosi.

Crown unstreaked and quite pale rufous, even orange-rufous, brown, contrasting quite sharply with the unstreaked grey-brown mantle. No chestnut or rufous patch in the closed wing. Ventral torso again quite dusky, with paler chin. Immature duller.

Like HUNTER'S, it duets from perches in very noisy fashion, but the calls are more explosive, lacking the smooth reeling effect. The two species can in any case be separated by the presence/absence of mantle streaking. CHUBB'S could be mistaken for SINGING, but the calls are quite different; the crown of CHUBB'S is brighter rufous; SINGING has a contrasting brown patch in the closed wing, which CHUBB'S lacks.

e) TRILLING CISTICOLA *C. woosnami*

There are three very useful identification points here. Firstly, its range in Kenya is restricted to the far west: the few records are from the Ololo1o-Lolgorien areas of Mara (Mann, 1974), and the Rapogi and Wire Hills areas of South Nyanza (Sugg & Sugg, 1972); Britton (1980) notes its apparent absence from the area between South Nyanza and Mt Elgon. Altitude range 900-1800 m.

Secondly, the plumage is distinct, if rather drab. The brown mantle is unmarked, and slightly but distinctly contrasts with the subtlely richer chestnut-brown crown; no contrasting brown or rufous patch in the closed wing; ventral torso whitish, with dusky greyish flanks and sides to the breast; bill slightly decurved and weak; adult females up to 20% smaller than adult males. Unlike the members of this group mentioned above, young birds of this species have a distinct plumage, which Mackworth-Praed & Grant describe as more russet above, and yellow below.

The third feature is the unique and distinctive song, which is delivered from a very high treetop perch, where the bird can remain for hours. This song is described as a "soft reeling trill, high pitched", lasting up to 5 seconds and like the call of some Cicadas; side to side movement of the bird's head renders the noise ventriloquial (Mackworth-Praed & Grant, 1960). My single experience of this noise recorded a wavering, lispy, tinny, three second trill; the bird also uttered an almost flutey squeak, and frequent loud scolding "chew chew chew" alarm calls.

The parties of birds I saw (in NE Rwanda in early July, but still the nominate race as occurs in Kenya) were noisy and prominent, and numbered up to five individuals, they were in a dry grassy woodland habitat, and were frequently high in the treetops or on the tops of low shrubs.

Habitat in the Mara area is described as open, rocky, bush-clad hillsides (Mann, 1974), while the species was reported as common and in song on the slopes of Wire Hill in June (Sugg & Sugg, 1972). Other habitats include bushed, wooded and virtually treeless grassland, and overgrown cultivation.

f) WHISTLING CISTICOLA C. lateralis

I have no field experience of the remaining two species in this group and thus have had to draw on the literature, particularly Mackworth-Praed & Grant, very extensively. But both these species have quite distinctive features, and very restricted ranges in Kenya.

There are three points useful in the identification of the WHISTLING. Firstly, its range in Kenya is restricted to the far west :- Siaya District and Mt Elgon, and Kakamega Forest; altitude range 900-1900 m.

Secondly, its plumage resembles that of TRILLING, while being quite distinct from the other species already described :- crown and mantle uniform dark to sooty brown with none of the contrast shown by TRILLING; no rufous or brown in the closed wing; ventral torso creamy white, with dusky colouration along the flanks; bill stout and robust, unlike TRILLING. Young birds again have a distinct plumage, being russet above, and yellowish on the chin, breast and sides of the face. Males again are up to 20% larger than females.

Thirdly, the song is unique. Undisturbed breeding males sing from prominent and very high treetop perchs, and produce a "loud, rich whistling song unlike any other Cisticola, an opening note followed by even full syllables" (Mackworth-Praed & Grant, 1960).

Habitat is thick vegetation in damp areas and along streams, in woodland and forest edges, eg grassy glades on the northwest edge of Kakamega Forest (feeding young in March; Mann, 1973).

g) ROCK-LOVING CISTICOLA C. aberrans

This is perhaps the most peculiar member of the genus, prefering a habitat of bare, scarcely vegetated rocks. D.A. Turner (pers. comm.) describes it as being "like a mouse scurrying around on the rocks", while Lynes (1930) comments on its "silent unobtrusive manner" - an easy bird to overlook.

Range in Kenya is again very restricted, to both brown basement rocks with flat surfaces, and to spreads of recent black lavas, in the Tsavo West - Taita Hills area; there is an old record from Limuru.

Size as SINGING; chestnut brown crown contrasts with the brown or grey-brown mantle, both of them unstreaked; no rufous or brown patch in the closed wing. Mackworth-Praed & Grant (1960) illustrate prominent rufous-brown vent and under tail coverts, but the race C.a. teitensis (ie the one found in Tsavo-Taitas) has the lower belly whitish. Young birds are uniformly warm brown above. Plumage is similar to TRILLING, but the two are easily sepatated by range, habitat and behaviour.

REFERENCES

Britton, P.L. (ed.) 1980 Birds of East Africa. Nairobi:EANHS
" " & Sugg, M. St. J. 1973 Birds recorded on the Kimilili Tract, Mt. Elgon, Kenya. Journal of the East Africa Natural History Society and National Museum, 143, 1-7.
Gruson, E.A. 1976 Checklist of the Birds of the World. Collins, London
Lynes, H. 1930 Review of the Genus Cisticola. Ibis Supplement, 12th Series, vol V1; 2 volumes
Mackworth-Praed, C.W. & Grant, C.H.B. 1960 African Handbook of Birds. Series 1; vols 1 & 2. Birds of Eastern and North Eastern Africa. Longmans, Green & Co., London.
Mann, C.F. 1973 Two new birds breeding records for Kenya. EANHS Bulletin, 39
" " 1974 Some bird notes from the Mara. EANHS Bulletin, 78-79
Roberts, A. 1978 Birds of South Africa. Revised by McLachlan, G.R. & Liversidge, R. John Voelcker Bird Book Fund, Cape Town
Sugg, M. St. J. & Sugg, G. 1972 Notes on some birds recorded in South Nyanza, Kenya. EANHS Bulletin, 38-40
Turner, D.A. 1977 Status and distribution of the East African endemic species. Scopus, 1. 2-11
Williams, J.G. 1963 A Field Guide to the Birds of East and Central Africa. Collins, London
" " 1976 A Field Guide to the National Parks of East Africa. Collins, London
" " & Arlott, N. 1980 A Field Guide to the Birds of East Africa. Collins, London

Adrian D. Lewis, Dept. of Geology, P.O. Box 30197, NAIROBI

FISCAL SHRIKE KILLS PREY BY IMPALING IT ON THORN

On 8th August 1981 in Nairobi National Park I observed a Fiscal Shrike, *Lanius collaris*, perched on a signpost with a large (about 8 cm) locustid grasshopper in its bill.

The bird was obviously having difficulty in dispatching the grasshopper and after a few unsuccessful attempts at beating it to death on the post, flew to a nearby acacia where it impaled the insect on a thorn. I assumed that I was seeing a "butcher bird" stocking up it's larder, but the shrike, which had impaled the grasshopper lengthwise through the abdomen, removed the insect as soon as it was incapacitated, pulled off the legs and consumed it. I am convinced that the bird was using the thorn as a tool to immobilize an insect which was too large for it to deal with otherwise.

- - - * - - -

GREY HORNBILLS ACCOMPANYING OLIVE BABOONS

On 26th September 1981 I was watching a troop of about 30 Olive Baboons, *Papio cynocephalus anubis*, working their way across a low ridge south of Lake Magadi, Kenya. As the leading animals crossed the ridge, two Grey Hornbills, *Tockus nasutus*, appeared over the ridge and settled on low trees near them. The rest of the troop followed, spread over a distance of about 100 m, and six more Grey Hornbills crossed the ridge with them.

As the baboons progressed slowly along the ridge and then down the slope at almost right angles to me the hornbills followed, flying a few metres at a time and then perching on low trees beside them.

The hornbills were clearly accompanying the baboons; when one group of baboons moved a little further down the slope, away from the rest of the troop, two of the hornbills flew down and perched beside them.

I assume the hornbills were seeking insects or any other small creatures disturbed by the baboons, in the way that Cattle Egrets, *Bubulcus ibis*, feed alongside large mammals, but I did not see any of the birds actually feed during the 15 minutes I was watching them.

I am familiar with Grey Hornbills in West Africa but have never before seen them accompanying baboons or any other animals.

M.E.J. Gore, P.O. Box 48543, NAIROBI

A BRIEF GUIDE TO PLANT NAMES

PART 2

Miscellaneous			
alata	-winged	barbata	-bearded
alpina	-alpine	bidentata	-two toothed
amabilis	-lovely	bulbifera	-bearing bulbs
annua	-annual	capensis	-Cape of Good Hope
aquatica	-growing in water	capitata	-in heads
arborea	-tree-like	ciliata	-fringed with hairs
aspera	-rough to touch	citriodora	-lemon scented
asphodeloides	-like asphodel	corniculata	-horned

dentata	-toothed
diffusa	-spread out
elata	-tall
elatior	-taller
elegans	-elegant
elegantissima	-most elegant
erecta	-growing upright
esculenta	-edinle
excelsa	-lofty
falcata	-hooked
foetida	-strong smelling
fragrans	-sweet smelling
frangrantissima	-most sweet smelling
fruiticosa	-shrubby
gigantea	-gigantic
glabra	-smooth, no hairs
globosa	-globe shaped
gracilis	-slender, graceful
grandis	-of grand size
hirsuta	-hairy
hirta	-rough
hispida	-with stiff hairs
horrida	-with spines
humilis	-small, on the ground
insigne	-handsome
lanata	-woolly
lanceolata	-lance-shaped
lanuginosa	-with long woolly hairs
laxa	-loose
macrantha	-large spines
macrocarpa	-large fruits
macrocephala	-large headed
maculata	-spotted
major	-greater
majus	-great
maxima	-greatest
media	-medium
microcarpa	-small fruits
mimosoides	-like mimosa
minima	-smallest
minor	-smaller
minuta	-small
mollis	-soft
montana	-of mountains
mucronata	-small pointed
nana	-dwarf
natans	-floating
nitens	-shining
nitida	-shining
nobilis	-noble
nucifera	-nut bearing
nutans	-nodding
odoratissima	-very sweet scented
odorata	-sweet smelling
officinalis	-of use to man
ornate	-adorned
palustris	-of swamps
paniculata	-with panicles
patens	-spreading
pilosa	-shaggy
procumbens	-prostrate
prostrata	-prostrate
pubescens	-with soft hairs
pulchellum	-small & beautiful
pulcherrima	-most beautiful
pulchra	-beautiful
pumila	-dwarf
punctata	-dotted
radicans	-rooting
repens	-creeping
retusa	-blunt
rigida	-stiff
rotunda	-round
rugosa	-wrinkled
sativa	-sown or planted
scabra	-rough
scandens	-climbing
sensitiva	-sensitive
sericea	-silky
setosa	-with bristles
sinuata	-wavy-edged (leaves)
speciosa	-handsome
spectabilis	-showy
spicata	-flowers in spikes
spinosa	-spiny
splendens	-splendid
stricta	-upright
tenuifolia	-narrow leaved
tomentosa	-downy leaved
tortuosa	-twisted
umbellata	-with umbels
verrucosa	-warted
verticillata	-whorl leaved
villosa	-hairy
volubilis	-twining
vulgare	-common

Note: Most of the names above are spelled ending in -a. As mentioned previously, the generic and specific names must 'agree', so that these can change giving Asplenium abyssinicum, Astragalus abyssinicus and Bartsia abyssinica.

REFERENCES

Williams, R.O. Useful and Ornamental Plants of Zanzibar and Pemba.
Johnson, A.T. & Smith, H.A. Plant Names Simplified.

Mrs R.A. Nicholson, P.O. Box 259, MBEYA, Tanzania

POSSIBLE SOLUTION TO THE SALVINIA PROBLEM ?

After reading an article in a recent EANHS Bulletin about waterlilies, we planted some waterlilies in our research pond near Chiromo campus. This five metre pond contained, at the time of introducing the lilies, papyrus, cattails, Nile cabbage and Salvinia with the macrophyt s covering about two-tenths of the pond's surface. After adding the waterlilies, the pond retained about the same proportion of macrophytes and its open surface water was decreased only slightly by the addition of waterlilies. There definitely was a sort of ecological balance.

Disaster came when we introduced a drake and duck (two common domesticated ducks). The waterlilies were gone after the first night, the Nile cabbage and Salvinia disappeared after a week and now there are only ducks, papyrus and cattails in the pond and about 95% open water. The ducks have taken to removing the lower leaves of nearby sunflower plants.

Where did the Salvinia go ? Is this a possible solution to East Africa's Salvinia problem ? How many hungry ducks would it take to clear up the Salvinia in Lake Naivasha ? That ducks will eat the weed is now an established fact. What remains to be investigated is a feasible method of harvesting the floating fern. Ducks and probably chickens would be fed the fern. Salvinia will thus serve as an indirect source of protein for our rising human population in the future instead of being a noxious aquatic weed it is.

Stephen G. Njuguna & Stephan Conger, Botany Department,
P.O. Box 30197, NAIROBI

CAMP AT MAPARASHA HILLS, BISSEL

This very enjoyable weekend camp, held between 18th and 20th September 1980, was originally suggested by Yvonne Malcolm-Coe. In the event, she could not attend herself but very kindly offered to take a small Nairobi School party to the site the weekend before, to locate it properly and to work out a tentative programme. The 'advance party' had therefore two opportunities to enjoy this glorious place.

About half a dozen vehicles made it before sunset on the Friday evening of the actual camp weekend, and by the middle of the 19th about 20 vehicles had all successfully negotiated the very formidable-looking track. This track was apparently blazed first by British troops during the First World War, to bring up heavy guns to the two small forts above the spring of water. The camp site is adjacent to and slightly above this spring, which now supplies a small reservoir. There is a magnificent view south eastwards to the ranges of hills beyond the valley of the Selengei sand river winding below.

There is an abundance of varied bird life in the bushes around the site, round the reservoir itself and in the fairly open scrub and woodland fringing the last section of the track (not motorable) up to the forts. Beyond are two magnificent open ridges commanding views towards Longido and Mts Kilimanjaro and Meru (these two latter were unfortunately not clearly visible). The rock formations are of considerable geological interest, and, as the vegetation slowly changes to moorland grassland, one sees the Augur Buzzard, White-necked Raven and Egyptian Vulture - these last two competing in eager anticipation for scraps of food from the climbers toiling up below.

The hill tops are often in cloud in the early morning so that one finds traces of mist forest, with orchids on some of the trees. Bushbuck and Chanler's Reedbuck were spotted along the route and Hyaena heard at night. One very welcome feature of both the visits was the most friendly and tolerant attitude of the local Masai.

For the advance party, the highlight was undoubtedly a flight of Eurasian Bee-eaters, newly arrived, wheeling joyously through the air, and perhaps en route to South Africa. Most campers enjoyed the exhilarating sense of freedom walking on the hills. Mike Gilbert was most gratified to discover a new ground orchid, up to now recorded only in Tanzania. His description is : Holothrox randii, a South African species, one collection from Tanzania, the first for Kenya. This is a dry season flowerer, on the top of the ridges, where he comments on "the sheer quantity of epiphytic orchids".

In spite of feeling quite ill, Brain Meadows nobly led two bird walks. We also appreciated the knowlesgeable company of Dr Mark Collins at the camp (he is currently doing termite research at Kajiado and Bissel is part of his area). Some of the campers at Maparasha were delighted to see him again at the next Nairobi meeting of the Society - not quite in person, but in the film Mysteries of the Green Mountain, where he was explaining his termite research in the tropical forests of Sarawak. The Maparasha Hills are not quite so mysterious, of course, but many campers will undoubtedly look forward to a return visit to this unspoilt spot of abundant bird life, bracing sunny air and outstanding natural beauty. Some, too, will come with the bird books, note books and even tape recorders to make a start on the bird list the Society would like from this area.

Peter Johnston

(The Society is most grateful to Peter Johnston and junior members from Nairobi School for leading this trip. Ed.)

BOOK REVIEWS

CRADLE OF MANKIND by Mohamed Amin; Commentary by Brain Tetley; Forward by Richard Leakey.
Chatto Windus, London, 1981. 192 pages, 161 Colour Photographs, 8 Colour maps. U.K. £ 14.95

Lake Turkana is the largest alkaline lake in the world, with an area of 2470 square miles and lies in the Rift Valley in northern Kenya. This bluish-green 'Jade Sea' forms a startling contrast to the rugged and inhospitable lava desert which surrounds it.

Six major tribes of hunters and nomads - the Samburu, Turkana, Merille, Gabbra, Rendille and el-Molo - live around the Lake and the book under review is a photographic and textual study, not only of the lake itself, but also of the way of life of these people.

The photographs, all in colour, are eye-catching and of the lavish standard expected from a professional photographer of Mohamed Amin's international stature. The beautiful studies of the tribes and the country which they inhabit inevitably dominate the book, but this is as it should be, since they are the motivation for its production. But eight excellently designed colour maps and a very readable commentary by Brian Tetley make this much more than just a picture book.

The ornithological appeal of the area and the outstanding work in pre-history carried out by Richard Leakey and his co-workers need hardly any reminder. The first two chapters provide an interesting summary of the 'story' of the Lake and the scientific work in progress. The photographic sequences of the Samburu circumcision ceremony and the el-Molo hunters are important contributions to the records of the primative way of life of these tribes, which must inevitably suffer under the influence of civilization.

The book should have a wide appeal, with its attractive lay-out, well produced colour plates and maps, and informative text.

John Karmali

THE LEGENDARY GROGAN - Kenya's Contraversial Pioneer.
Leda Farrant. Hamish Hamilton. 260 pp, photographs, 1 map.
U.K. £ 12.50

Kenya's history goes back hundreds of years, its prehistory (which merely means the period before events were recorded), into millions of years. Until further researchers reveal more facts, and more oral traditions are recorded in print or on tape, the tendency to regard the country's history as dating from the advent of the European will remain. While this is clearly erroneous, the fact remains that much of interest occured in that period, and now that most of these early settlers are dead, the stories of their lives, their experiences, and contributions to Kenya's development, good or bad, are beginning to appear in print.

For those living in post-colonial Kenya, the name Ewart Scott Grogan either strikes no chord at all, or, if it does, its vibrations tend to arouse aversion. It is important that the facts about such people should be presented with truth and insight, so that those who never knew them may make their own assessment of their worth. This Leda Farrant has done with her fascinating and well-written book, drawing on personal reminiscences of Grogan's family, friends and acquaintances, as well as on contemporary official documents and newspapers.

One generally held illusion, promptly shattered by this book, is that Grogan's famous trip from Cape to Cairo was a 'walk'. The first part of his journey, as far up as Beira, was accomplished in 1896, by train, when Grogan went to Africa to fight in the second Matabele war. It was some two years later, inspired by Cecil Rhodes' dream of rail and telegraphic communication from the south to the north of the continent - and by his own desire to prove himself a worthy suitor for Gertrude Watt, whom he later married - that Grogan returned from Britain to Beira, determined to trek north. The first stage of this journey was by river boat to Chiromo in Nyasaland, and this pattern was to repeat itself with some frequency, full advantage being taken of any available water transport. Nevertheless, many hundreds of miles of this gruelling trip were trekked on foot, and Grogan and his companion, Arthur Sharp, were to have firsthand experience of

Africa's natural history. This was usually exemplified by its nastiest representatives, cockroaches the size of mice, mosquitoes, bloodsucking flies, and the occasional python. Game there was in abundance; he discovered a new race of reedbuck (Cervicopra thomasinae) which gained him the Fellowship of the Zoological Society.

Although shooting for the pot and sometimes for sport, even then he confessed to 'often staying his hand', and, as with so many hunters, he was later to become a keen conservationist. After numerous close encounters with death, Grogan finally reached Sobat in the Nile swamps, and after a period of recuperation continued up the Nile, by boat to Khartoum, then rail and steamer to Cairo.

Grogan was undoubtedly a man 'gifted by nature far beyond the ordinary'. What interests us is how he used those talents. To some extent, inevitably, it was to benefit himself. He acquired vast tracts of land in Kenya (at one time he owned over 186,000 acres, more even than his contemporary, Lord Delamere). But his knowledge of geology and agriculture, his passion for channelling water to make the wilderness fertile, and his almost uncanny foresight, proved valuable factors in advancing the country's development. With his first-class brain and gift for oratory, he was an effective advocate of the 'rights' of settlers. For some years he vacillated, travelling between Britain and Kenya, but in 1910 he returned for good. Though he never overcame his repugnance to Asian immigration, he gradually came to admire certain up-and-coming Africans. In 1967, an old, sick man, he left Kenya never to return, though the decision to leave the land he loved was obviously not his.

Leda Farrant's lively style conveys a sence of immediacy to her material, and her well-researched account of this many-faceted, controvercial character ensures that, whatever one's preconceptions, interest never flags. It is an achievement any author would be proud of.

Joan Karmali

REQUESTS FOR INFORMATION

i) Black Sparrowhawk Any positive sightings or confirmed breeding records of the Black (Great) Sparrowhawk, Accipiter melanoleucus, with localities and dates would be gratefully received. All information will be treated in the strictest confidence.

This information is required as part of a continuing study of this species initiated by the late Dr Leslie Brown.

C.F. Dewhurst, P.O. Box 30023, NAIROBI

ii) African Finfoot Sir Hugh Elliott, 173 Woodstock Road, Oxford OX27 NB, England would be most grateful for any behavioural information on the African Finfoot, Podica senegalensis. Data direct to Sir Hugh please.

iii) Ahmed and other Elephants Mr Guy Hellam of P.O. Box 192 SINOIA, Zimbabwe has written to the Society requesting information on the famous elephant Ahmed for a book he is writing. Any member who shares Mr Hellam's interest in elephants and who is prepared to assist by putting down some facts about Ahmed and, if possible, another old colossus Selamani, is requested to be in touch with Mr Hellam or the Society. The information required is as follows :-

i) good photographs of Ahmed alive, with if possible, pictures of Mohammed, his predecessor, and the legendary Selamani.

ii) information on the size of territory Ahmed was known to traverse and particularly about his temprement.

iii) does anyone know at approximately what age Ahmed lost interest in accompanying cow herds. And was there a body guard of younger bulls hanging around latterly.

iv) does anyone know what happened to Zimmerman Ltd and do they have an address for the company (Mr Hellam requires some measurements from them).

v) when in Arusha many years ago, Mr Hellam recalls seeing a fossilized tusk of colossal size embedded in the wall of the Parks Department and he wonders if anyone has a photograph of this remarkable object with relevant data - place of origin, total estimated length, approximate weight with the diameter of the largest fragment. (Tanzania members, please)

vi) any information at all, possibly with photographic evidence of any other remarkably big elephant alive or dead.

vii) Mr Hellam has a note that the record East African ivory is a pair of tusks in the British Museum (Natural History) weighing 220 and 222 lbs. He wonders if any member knows anything of the background of these tusks.

Naturally all credit will be given to all sources for any material published. The book will be a simple semi-scientific account of the elephant today and the problems attending their survival, interlaced with as much factual data of famous individuals as possible. We hope that members will help with this interesting project.

WANTED

i) Upland Kenya Wild Flowers Ten copies of Agnew's book are needed, but even one would help. Please contact Larry Siemens, University College of Eastern Africa, P.O. Box 2500, ELDORET, Kenya

ii) Flora of Tropical East Africa The following parts are needed :- Bixaceae, Capparidaceae, Combretaceae, Convolvulaceae, Gramineae Part 2, Guttiferae, Juncaceae, Juncaginaceae, Leguminosae Part 3, Papilionoideae, Lemnaceae, Marantaceae, Melastomataceae, Menispermaceae, Monimiaceae, Oleaceae, Orobanchaceae, Tamaricaceae, Typhaceae, Vahliaceae. Please contact Larry Siemens, University of Eastern Africa, P.O. Box 2500, ELDORET, Kenya

iii) Feathers The Kenya Trout and Salmon Flies Ltd has written to the Society requesting members help in obtaining feathers to be used in their fishing flies business which is operated by Cheshire Homes using handicapped employees. Any member with bird feathers, from casulties, natural moult etc is asked to leave them in a plastic bag at Room 21 Baring Archade, Nairobi with a tag or label for acknowledgement, or send them direct to Cheshire Homes, Dagoretti, Box 42693, NBI.

iv) *East African Wildlife Journal* The Society is anxious to obtain a copy of the above journal, Vol 11, No 2, 1973 which has been lost by a member. Our efforts to purchase a copy from the publisher have failed and we appeal to any member with a spare copy to deliver it to the Society's office or direct to the Library. Thank you.

FOR SALE

A member has the following secondhand books for sale, all in good condition :-

David A. Bannerman 1953 *The Birds of West and Equatorial Africa* 2 volumes, no dust wrappers....Shs 1500/-

Noel Simon 1962 *Between the Sunlight and the Thunder.* The Wildlife of Kenya....Shs 130/-

Douglas Collins 1960 *A Tear for Somalia.* With dust wrappers and dedicated by the author to Elsie and Basil Pickering, also autographed by the author on the title page....Shs 200/-

These can be viewed in the Society's office at the National Museum.

VERY IMPORTANT FUNCTIONS NOTICE

MEMBERS ARE KINDLY REQUESTED TO NOTE THAT THE FOLLOWING FUNCTIONS WILL BE HELD ON DAYS OTHER THAN THE SECOND MONDAY OF THE MONTH; TIME AND VENUE REMAIN THE SAME - MUSEUM HALL AT 5.30 p.m.

Monday 7th December 1981 Mr Richard Leakey, Director and Chief Executive of the National Museums of Kenya will lecture on Prehistory.

Monday 21st December 1981 Dr Lester L. Short, Chairman and Curator, Department of Ornithology, American Museum of Natural History, New York, will give his first lecture on ornithology.

Monday 4th January 1982 Dr Hendrick N. Hoeck, Biology Department, Universitat Konstanz, will give a lecture on *The Social Organization and Ecology of the Hyrax* followed by a film *Social Organization of Hyrax in the Serengeti.*

Monday 18th January 1982 Dr Lester L. Short (as mentioned above) will give his second talk on ornithology.

WE HOPE THAT AS MANY MEMBERS AS POSSIBLE WILL SUPPORT THESE FOUR LECTURES GIVEN BY ACKNOWLEDGED EXPERTS IN THEIR FIELDS. PLEASE CARRY YOUR MEMBERSHIP CARDS - GUESTS SHS 10/- EACH.

The following books are available to members from the Society's office at the National Museum at special members rates :-

Check List of the Birds of Kenya Shs 10/-

Birds of East Africa Shs 130/-

A Field Guide to the Birds of East Africa - Williams - Shs 175/- Yes - stocks have finally arrived by air freight. We regret the slight price increase from the advertised Shs 160/- but this was necessary due to increased wholesale costs. Orders by post are accepted for this book but please enclose a further Shs 5/- for postage and packing.

The Breeding Seasons of East African Birds Shs 80/-

The Aloes of Tropical Africa and Madagascar, Reynolds. A very special book which is difficult to obtain in Kenya is offered to members at the much reduced cost of Shs 240/-. Limited supply.

Useful and Ornamental Plants of Zanzibar and Pemba, R.O. Williams. Again almost impossible to find in Kenya but a must for anyone interested in coastal botany - Shs 80/-

Common Trees of the Highveld (bundu series) Shs 30/-

Flowers of the Veld (bundu series) Shs 30/-

Some Well Known African Moths (bundu series) Shs 45/-

Butterflies of Rhodesia (bundu series) Shs 40/-

Birds of the Lowveld (bundu series) Shs 40/-

Bundu Books 1 & 2 Shs 35/- each

Revised Catalogue of African Sphingidae, Carcasson. Published in the Society's Journal, No.115 and reprinted by Classey. Special reduced price of Shs 40/-

Swallowtail Butterflies of East Africa, Carcasson. Published as a special supplement to the Society's Journal and reprinted by Classey, Shs 25/-

Birds of South Africa, Roberts, 3rd Edition, 1st impression, a second hand copy in perfect condition with dust wrappers, Shs 270/-

Miscellaneous Items for Sale

Car Stickers Only Shs 2/- each and useful for displaying your road license and insurance as well as advertising the Society to the uninitiated ! Can also be used as 'stocking fillers' for Christmas !

Informal Notes Stocks still available of these most attractive informal notes, 12 in a packet, with envelopes of six different designes, air mail weight for only Shs 10/- a packet. An ideal small Christmas present. The more you buy the less we will have to move upstairs !

Notes and Notices

Christmas Book Service Many members ask us for special 'coffee table' books to give as Christmas presents. Normally we do not carry stocks of this type of book, but this year the Society is willing to purchase them, at a discount rate, for members wanting to take advantage of this service. The type of books we can obtain are 'Cradle of Mankind' (reviewed in this Bulletin), 'The Book of Kenya', 'Faces of Kenya', 'African Hunter'...etc. Please drop us a note at Box 44486, Nairobi to place your orders, or call into the office at the Museum and we will purchase your books as soon as possible.

Another Christmas Idea Are you stuck for a present for a keen natural historian ? Why not give a year's subscription to the Society - only Shs 70/-.

Subscription Renewals The first subscription renewal form is enclosed in this Bulletin. We are always grateful to those who renew their subscriptions early as this reduces the amount of work we have to face at the beginning of the year.

Progress Report on the Museum move The Sections of Ornithology, Entomology and Mammalogy are now in their new offices in the Division of Natural Sciences Building on the Museum compound. The 2.8 km of shelving in the Herpetology Section is being painted and this section should move shortly. As a result of this the :-

Society's New Offices will be in the old Entomology Department, through the back door of the Museum, up the steep wooden stairs and to the right. We will be in the old butterfly room and Mr Clifton's old office and will take over the store currently used by the Museum Society. We will continue to use the old archives room as a further store. The paint for these rooms has been ordered and as soon as the Museum staff have painted we will move. Those kind members who offered their help with the move will be contacted shortly !

STOP PRESS FUNCTIONS SUNDAY 6th DECEMBER 1981
HELLS GATE TRIP. DR ADRIAN LEWIS WILL LEAD AN AFTERNOON TRIP TO HELL'S GATE, LAKE NAIVASHA TO STUDY THE VERY INTERESTING GEOLOGY OF THE AREA AND IN THE LATE AFTERNOON TO WATCH THE MANY SPECIES OF BIRDS WHICH ROOST IN THE CLIFFS. PLEASE MEET AT THE LAKE HOTEL, NAIVASHA (SOUTH LAKE ROAD, BEFORE NAIVASHA TOWN - FIRST HOTEL ON THE RIGHT, WELL SIGN POSTED) AT 3 p.m. THE AREA CAN BE VERY HOT DURING THE AFTERNOON BUT AS SOON AS THE SUN DROPS DOWN BELOW THE CLIFFS IT CAN BECOME VERY COLD AND WINDY.

While on functions, members are requested to note that most of the forthcoming lectures are not on the second Monday of each month, please see the special notice on page 122 as well as the full programme on pages 125 and 126.

New Journal Parts The following new Journal parts are included with this issue of the Bulletin to all full, life and institutional members :-

Journal No 171 'Vegetation Analysis of the Upper Teleki Valley (Mount Kenya) and Adjacent Areas' H. Rehder, E. Beck, J.O. Kokwaro, R. Scheibe.

Journal No 172 'Ecological Analysis of the Boundary Between the Afroalpine Vegetation Types 'Dendrosenecio Woodlands' and *Senecio brassica* - *Lobelia keniensis* Community' on Mt Kenya' E. Beck, H. Rehder, P. Pongratz, R. Scheibe, M. Senser.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Miss M. Aucutt, P.O. Box 49942, NAIROBI
Ann Barnett, c/o KARI, P.O. Box 30148, NAIROBI
J.J. Beckett, P.O. Box 14874, NAIROBI
Mrs J.D. Brown, c/o KARI, P.O. Box 30148, NAIROBI
Prof & Mrs Arthur Campbell, Chemistry Department, P.O. Box 30197, NAIROBI
Mandy Charleston, Banda School, P.O. Box 24722, NAIROBI
Dr and Mrs Andrew Clark, P.O. Box 20, NANYUKI, Kenya
Dr and Mrs N.M. Dickinson, Botany Department, KUC, P.O. Box 43844, NAIROBI
Dr and Mrs Gaches, P.O. Box 47040, NAIROBI
Mrs D.D. Gill, P.O. Box 10222, NAIROBI
Mr and Mrs W.M. Good, P.O. Box 42011, NAIROBI
Richard Turton Greaves, P.O. Box 30333, NAIROBI
Ugo and Kathy Guido, P.O. Box 30783, NAIROBI
Mr and Mrs Philip Harvey, P.O. Box 30437, NAIROBI
Mrs Phoebe A.O. Josiah, Division of Vector Borne Diseases, P.O. Box 20750, NAIROBI
Gillian Key, P.O. Box 14469, NAIROBI
S.E. Lauritzen, P.O. Box 46327, NAIROBI
Dr M. Litterick, Zoology Department, P.O. Box 30197, NAIROBI
Miss Rhodia Mann, P.O. Box 20360, NAIROBI
Heidi and Chresten Petersen, P.O. Box 40412, NAIROBI
Mr and Mrs D.B. Reid, P.O. Box 19001, NAIROBI
Sheila Parvyn Wamahiu, P.O. Box 72480, NAIROBI

Local Life Member

E.H. Tucker, P.O. Box 90462, MOMBASA

Local Institutional Member

St Lawrence University Semester Programme in Kenya, P.O. Box 43795, NAIROBI

Overseas Full Members

John Fanshawe, Welltown Manor, Bocastle, Cornwell, U.K.
Flemming Pagh Jensen, Zoologisk Museum, Universitesparken 15, DK 2100, COPENHAGEN, Denmark
Lucy Vigne, Keble College, Oxford, U.K.

Overseas Institutional Member

Cambridge University Library, West Road, Cambridge CB3 9DR, U.K.

SOCIETY FUNCTIONS

Sunday 8th November 1981 INFORMAL DAY OUTING. Please meet at the National Museum at 9 a.m. prepared to spend a day you know not where. Bring a picnic lunch, walking shoes, binoculars and note book. Ideas and suggestions can be discussed at the previous Wednesday morning bird walk or 'phone Gilbert 48571.

Monday 9th November 1981 NO PROGRAMME Please see 16.11.81

Saturday 14th November 1981 Afternoon trip to DANDORA SEWAGE WORKS to view the migrant and resident birds, kindly led by Brian Meadows. Please meet at the National Museum at 2.30 p.m.

PLEASE NOTE THE FUNCTIONS PROGRAMME STARTS ON THE PREVIOUS PAGE

Bring soft drinks as it can be very hot around the lagoons.

Monday 16th November 1981 in the Museum Hall, Nairobi at 5.30 p.m. MEMBERS SLIDE SHOW. Please bring along 10 of your best slides and be prepared to talk about them.

Weekends of 21st/22nd & 28th/29th November, 5th/6th December 1981 BIRD RINGING AT NGULIA LODGE Dr David Pearson of the Society's Ornithological Sub-Committee will be at Ngulia Lodge, Tsavo West National Park, hoping for rain and low cloud in order to net and ring some of the vast numbers of migrant passerine birds which are attracted to the Lodge lights in poor weather. For Lodge bookings please contact Mrs Kariuki, African Tours and Hotels, 'phone 336858. For more information please 'phone David Pearson 47041 (evenings).

Sunday 29th November 1981 FOURTH ANNUAL NAIROBI BIRD CENSUS If you would like to take part in this interesting exercise, please complete the enclosed form and return it with a stamped addressed envelope to The Secretary, P.O. Box 44486, Nairobi as soon as possible. Species lists and instructions will then be forwarded to you or can be obtained from the office.

*****SUNDAY 6th DECEMBER 1981 HELLS GATE TRIP - see page 124******

Monday 7th December 1981 in the Museum Hall, Nairobi at 5.3p p.m. MR RICHARD LEAKEY will present another of his excellent lectures on prehistory. (Guest fee Shs 10/-).

Friday 11th/Saturday 12th/Sunday 13th December 1981 Weekend trip to SAIWA SWAMP, near Kitale, home of the rare Sitatunga and many interesting bird species by kind invitation of Mr and Mrs Barnley. If you wish to take part in this trip, kindly complete the enclosed form and return it, with a stamped addressed envelope to The Secretary, P.O. Box 44486, Nairobi before 4th December 1981. Instructions etc will then follow.

Sunday 13th December 1981 INFORMAL DAY OUTING. Please meet at the National Museum at 9 a.m. and bring a picnic lunch, walking shoes etc. For more information please 'phone Gilbert 48571.

Monday 14th December 1981 NO PROGRAMME Please see 7.12 & 21.12

Monday 21st December 1981 in the Museum Hall, Nairobi at 5.30 p.m. DR LESTER L. SHORT, Chairman and Curator, Department of Ornithology, American Museum of Natural History, New York, will present a lecture entitled BARBET STUDIES AND HABITAT CONCERNS (Guest fee Shs 10/- each).

Monday 4th January 1982 in the Museum Hall, Nairobi at 5.30 p.m. DR HENDRICK N. HOECK, Biology Department, Universitat Konstanz, Germany, will present a lecture on THE SOCIAL ORGANIZATION AND ECOLOGY OF HYRAX followed by a film SOCIAL ORGANIZATION OF HYRAX IN THE SERENGETI. (Guest fee Shs 10/- each)

Sunday 10th January 1982 INFORMAL DAY OUTING. Please meet at the National Museum at 9 a.m.

Monday 11th January 1982 NO PROGRAMME Please see 4.1. & 18.1

Monday 18th January 1982 in the Museum Hall, Nairobi at 5.30 p.m. DR LESTER L. SHORT, Chairman and Curator, Department of Ornithology, American Museum of Natural History, New York, will present his second lecture on ornithology. (Guest fee Shs 10/- each).

Wednesday morning bird walks continue. Please meet at the National Museum at

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Mr. S.G. Njuguna, Dr. D.J. Pearson.
Co-opted Members: Mrs. H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Dr. A. Hill, Dr. F. Owino.
Journal Editorial Sub-Committee : Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas.
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, P.L. Britton, Mrs. H.A. Britton, P.B. Taylor, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee : (Society representatives) Prof. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee : Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SX
NH

EANHS
BULLETIN

SMITHSONIAN
LIBRARY

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN JANUARY/FEBRUARY 1982

CONTENTS

Field Identification of the Genus *Cisticola* (Aves) in Kenya: Part 2 2
Some Facts About the Breeding Biology of the Ground Hornbill 10
Notes from Masinga Dam, Tana River 12
Note on the Silvery-cheeked Hornbill 13
Caracal in the Aberdares ? 13
Annual General Meeting 13
Field Trip to Hell's Gate, Naivasha 14
Camp at Saiwa Swamp, 11th-13th December 1981 15
Book Reviews :
Sand Rivers 17
Secret Eden 18
Collins Handguide to the Butterflies of Africa .. 20
Wanted 21
Wanted Known 22
For Sale 22
Society Notes 22
New Members 24
Society Functions 26

FIELD IDENTIFICATION OF THE GENUS CISTICOLA (AVES) IN KENYA: PART 2

Part 1 of this series has already been published (EANHS Bulletin, pp 108-114, 1981).

This second paper deals with a further nine species which, with the possible exception of SIFFLING C. brachyptera, can be categorised as small. Wing lengths of the races of these species present in Kenya (from Mackworth-Praed & Grant, 1960) range 45-55 mm (adult males), with SIFFLING reaching 57 mm. Thus the birds of this group are, on wing length, a little larger than the Waxbill Estrilda astrild, and about the same size as such locally common species as the Red-billed Firefinch Lagonosticta senegala, the Yellow-breasted Apalis Apalis flavida, and the Variable Sunbird Nectarinia venusta falkensteini.

These 9 species can be conveniently divided into 2 broad subgroups :-

1) Subgroup A
   - a) contains PECTORAL-PATCH C. brunnescens, WING-SNAPPING C. ayresii, BLACK-BACKED C. eximia, ZITTING C. juncidis and DESERT C. aridula.
   - b) these species are all quite similar, being prominently streaked above and small in size.
   - c) all perform song flights; DESERT can also sing from a low perch.
   - d) all but ZITTING can produce wingsnaps in flight.
   - e) all inhabit open, often short grassland, ie are not dependent on the presence of trees.
   - f) all but DESERT show yellow colouration on the ventral torso in young birds.

2) Subgroup B
   - a) contains TINY C. nana, TABORA C. fulvicapilla, FOXY C. troglodytes and SIFFLING C. brachyptera.
   - b) the first 3 of these species are: small; unstreaked or diffusely streaked on the crown and mantle; reasonably colourful; some of the more distinctive and identifiable members of the genus. On the other hand, SIFFLING is one of the most drab and featureless of the Cisticolas, which is really saying something; though resembling the members of Subgroup A in appearance, some of its habits are those of B and thus it is included here.
   - c) all 4 sing from high treetop perches.
   - d) all 4 occur in bushy or wooded grassland, rather than the more open grassland of Subgroup A.
   - e) young birds are: yellow below in SIFFLING and FOXY; browner above in the other 2.

Other useful points, applying to both Subgroups, are that tail length and patterning are both useful in identification, and that no contrasting rufous or brown area is visible in the closed wing.

In addition to data from the sources detailed in Part 1, I have field experience of 6 of the species in this group.

Subgroup A

These 5 species probably pose the greatest identification problems in the genus. All except DESERT can be distinguished by their extrovert behaviour while breeding, but they are at other times the classic 'small, brown, streaked birds'.

a) PECTORAL-PATCH CISTICOLA *C. brunnescens*

PECTORAL-PATCH (hereafter called P-P), WING-SNAPPING (W-S) and BLACK-BACKED (B-B) were labelled by Lynes as the 'cloud-scrapers', as they all habitually sing from very high 'aerial cruise' songflights. They all have very short, stubby or stumpy tails, which contrast markedly with the longer tails of ZITTING and DESERT, the other 2 members of the Subgroup.

P-P is unusual in that it shows radical sexual dimorphism in plumage. The male has the crown (and sometimes nape) unmarked, often bright, brown-buff; this contrasts markedly with the mantle, which is pale buffish and so boldly streaked thick black as to appear at times almost blackish. The female has the top of the head a brighter buff, but prominently to thinly streaked black.

P-P derives it's name, as Mackworth-Praed & Grant blandly note, by the male's "black patches at the side of (the) neck", by which they mean the sides of the breast at the base of the neck. The female lacks these patches or has them severely reduced. I am uncertain of the usefulness of these patches as a fieldmark. My experience of the species is largely gleaned from very numerous observations in Nairobi National Park, on the high eastern grasslands and along the road from Cheetah Gate to Hippo Pools, where most of the P-Ps, even undoubted plain-capped breeding males, show these patches only diffusely or not at all. On the other hand, several of the Museum skins show them prominently black. Any comments welcome. Its probably best to rely on the plain-capped male for identification.

Both sexes show the following :- no contrasting rufous/brown patch in the closed wing; rump uniform with the rest of the upperparts; ventral torso creamish, often tinged buff to various degrees; dorsal tail very dark, even blackish, with a terminal pale band; tail short and stubby; young birds show yellowish throat and breast.

P-P inhabits dry, open, short grassland and moorland; altitude range 1400-2500m. Localities in Nairobi National Park given above; breeding April. Otherwise highlands of west and central Kenya, on both sides of the rift.

P-P is readily identified by its songflight behaviour. In the breeding season, on the eastern grasslands of the Park, the air is filled with a high, monotonous 'zee....zee....zee....' call, while interspersed wingsnaps sound like the snapping of finger and thumb. The sound can be heard to be high above, but the tiny spot of the bird is often out of sight, particularly if not caught in the narrow central cone of sharp vision (in cases of high-flying birds like this, it is essential to sweep the sky with your eyes to find them - a steady gaze upwards leaves most of the sky deceptively obscure in the less sensitive peripheral vision.

In the case of P-P, the bird is seen as a small high-flying spot, cruising fairly steadily and horizontally through the sky. The call is a 'zee' as opposed to the sharper 'zit' of ZITTING, and utterance of the call does not coincide with any regular jink or change of direction in flight (as it does in ZITTING). Wingsnaps are single and regular, and often quite quick, 'finger and thumb snappings', "as though in accompaniment to a song", though Lynes (1930) also mentions very rapid Flappet Lark (Mirafra rufocinnamomea) -like sounds.

Both the ascent to the cruise height and the descent from it have their distinctive features. Mackworth-Praed & Grant note that the song commences during the ascent, but I have seen them ascend without song but with wingsnaps; Lynes oppositely describes this species and the other short-tailed cloud-scrapers as looking like large bumble bees when they rise to their display flight height. The descent from the cruise is spectacular. One seen at Ngong involved a very fast, vertical drop to near ground level and a level junk just above the ground to perch on the top of a small clump of grass; there were no wingsnaps or calls during the descent, though Mackworth-Praed & Grant note chattering calls but no wingsnaps at this stage of the display. Which of us is correct on these points, or whether there are variations on the theme, I have no idea.

I have several times seen males apparently furiously attacking females during the breeding season, probably being stimulated by my presence to drive the females away from the area of the nest.

b) WING-SNAPPING CISTICOLA C. ayresii

Although lacking such striking sexual dimorphism in plumage, the other two 'cloud-scraper' species are very similar to P-P, and unfortunately I have field experience of neither of them.

Plumage of W-S :- crown brown, prominently streaked thick black, indeed appearing almost blackish in worn plumage; crown not noticeably contrasting with the similarly streaked mantle. Rump and dorsal neck collar paler than the rest of the upperparts. No rufous/brown visible in the closed wing. Dorsal tail dark with a pale tip as in P-P. Ventral torso cream, varyingly tinged buffish. Young birds paler above, yellowish below.

Habitat is again short grassland, both dry and damper; altitude range 1700-3700 m. For the highlands of west and central Kenya, Britton (1980) notes P-P as occuring at lower altitudes and often on drier ground than W-S, though they can overlap and breed on the same ground (usually 1700-1900 m, where W-S very rare). W-S can be seen displaying in May near the Kinangop flyover (junction of the new road on the eastern shoulder of the rift with the new tarmac road to Kamae, Kieni and Thika) (D.A. Turner, pers. comm.), and on high grassland near Kipkabus (SE of Kaptagat) (D.J. Pearson, pers. comm.).

W-S indulges in a high cruising songflight like P-P, with subtle differences. Mackworth-Praed & Grant's description makes very enjoyable and useful reading: the salient points:- (a) the call does not start until the ascent is complete (but then can P-P do this too?); (b) the cruise song is "a shrill whistle of 5 or 6 notes accompanied by volleys of wing-snapping (thus sounding like a Flappet Lark A.D.L.) and many swerves to and fro"; for the race mauensis (Eldoret-Ngong), the call is noticeably a "metallic clinking"; (c) the descent is P-P's vertical plunge to earth, but with "a twang like a bow string", + "an excitedly uttered single note", + "a sudden check close to the grass tops, a rapid and vertical 'jink' upwards for a number of feet, a short traversing flight and a final flop into the grass", all accompanied by a chattering call and volleys of wingsnaps - I call that impressive: everyone up to the flyover in May !

Seperation of P-P and W-S in the field must be one of the greatest problems in Kenya Cisticolas. The following pointers :-

1) breeding season behaviour, ie details of cruise flights, calls etc. Both species skulk in the grass when not breeding.
2) altitude, though some overlap.
3) male crown plumage of P-P.
4) paler and/or redder rump and dorsal neck collar of W-S contrast with the rest of the upperparts.

c) BLACK-BACKED CISTICOLA C. eximia

The third of the 'cloud-scrapers' is a bird of very restricted distribution in Kenya, only being reported from Mumias and the Yala River, in the extreme west. The habitat is given as "short grass on dry ground at 900-1500 m" altitude (Britton, 1980).

It is also notsworthy in being one of the 3 or 4 of the genus in Kenya to show distinct breeding and non-breeding plumages; in addition to this, it has significant sexual dimorphism in plumage. Breeding male stub-tailed and brightly coloured :- crown, nape and dorsal neck collar "rich rust red-brown", plain or with limited and thin dark streaking; mantle thickly streaked black so as to appear blackish; rump rather prominent plain rich rust red; dorsal tail again dark with pale tip; no rufous/brown contrasting patch in closed wing; ventral torso whitish, strongly washed buff on the flanks; dark pectoral patches can be present. Breeding female streaked above, including crown, with blackish back and stub tail (Lynes, 1930).

Non-breeding male :- tail medium length and no longer stubby (cf tails of DESERT and ZITTING) with ventral subterminal dark spots; rusty red dorsal neck collar seperates blackish mantle and blackish (+ thinly streaked white) crown; rump still prominent reddish. Young birds more buffish above, yellow below.

Display etc very similar to P-P, only the song "more twinkling" or varied (Lynes, 1930). The following identification points probably useful :-

1) range in Kenya; details of display flight and song.
2) breeding male from P-P; paler collar and rump, and crown colour
3) breeding male from W-S: crown colour and ornament.
4) non-breeding male: ventral only subterminal dark spots on the tail eliminates P-P, W-S and ZITTING.
5) distinctions from DESERT under that species.

d) ZITTING CISTICOLA C. juncidis

This and the following species (DESERT) are similar in appearance to the 3 'cloud-scrapers', but have subterminally lomger thus 'non-stubby' tails. ZITTING is also the only Cisticola to reach Europe, where it is called the Fan-tailed Warbler; thus see useful illustrations in Peterson, Mountford and Hollom (1974), and Heinzel, Fitter and Parslow (1974).

Male ZITTING has the crown and mantle brown with bold black streaking, these two well-marked areas seperated by a less streaked and thus paler dorsal neck collar. Ventral torso is the usual buffish tinged white. Female ZITTING is less boldly streaked above, and whiter below. Tail brown to palish brown, with both dorsal and ventral subterminal dark spots, and a pale tip. Rump palish brown. No contrasting rufous/ brown patch in the closed wing. Young birds rustier above and yellowish below.

Habitat is long or short open grassland, in dry or often damper situations; altitudes mainly low to medium. Localities include :- in song June 81 directly to the south of Athi Basin Dam, Nairobi National Park; always in song in the Ngulia area of Tsavo West National Park during the rains of November-December (combine with your ringing); long grass near the lake shore to the south of Lake Baringo Club.

This species again skulks in the grass during the non-breeding season, but freely perches on grass and low shrub tops when breeding. It can be instantly recognised by its unique undulating breeding season songflight, which is again an aerial cruise, though not performed at such great altitude as those of the 'cloud-scrapers'. The bird flies about above its nest area, uttering a continual, monotonous, single 'chip' or 'zit' call which is at once distinctive and audible over long distances; it can often be heard when the bird is not obviously in view. The unique feature of this songflight is that the utterance of each 'zit' call exactly coincides with an abrupt upwards bound or leap in the cruise. There are also occasional steep dives in over the feamle and/or nest area, but these dives are not of a wild or erratic nature. Thus just a single dip down out of the songflight, and then up and around about again. The often steeply undulating flight, combined with the monotonous 'zit', is diagnostic. It is also very important to note that this species never snaps its wings (cf 'cloud-scrapers' and DESERT). Tail length and/or ornament also distinguish ZITTING from the rest of Subgroup A.

e) DESERT CISTICOLA *C. aridula*

This is another small, heavily streaked, short-grassland species, but even silent birds can be seperated from the above 4 members of Subgroup A as follows :-

1) tail distinctly longer (ie almost the length of the wings (Roberts, 1978)) than the 'stumps' of the 3 'cloud-scrapers'. Non-breeding BLACK-BACKED (extreme W Kenya only) has a longer, non-stubby tail with similar patterning; but both crown and mantle in B-B appear blackish due to very dense dark streaking, while the rump and collar are reddish.

2) ZITTING has a tail of similar length to DESERT, but with subterminal dark spots on both the dorsal and ventral surfaces. Though DESERT has these spots on the ventral tail surface, the dorsal surface is uniform black to dark brown in colour, with a pale tip (birds in worn plumage can show paler edges to these long dark tail feathers).

Plumage of DESERT is otherwise similar to the others of Subgroup A :- boldly streaked crown, nape and mantle; no rufous/brown patch in the closed wing; ventral torso whitish, with the usual buff tinge. Young birds do not show ventral yellow, but are darker than adults.

DESERT is generally a less conspicuous, extrovert and aerial species than the rest of Subgroup A. The song consists of "small high-pitched tinkling notes of a single syllable several times repeated, at half-second intervals" (Mackworth-Praed & Grant), rendered "ting ($\frac{1}{2}$ sec.) ting....ting...." by Roberts (1978). This noise can be uttered from a low perch on grass or shrubs, or during a low aerial cruise flight. But this cruise is apparently monotonous, lacking the verve, aerobatics and/or wingsnaps of the rest of the Subgroup.

DESERT does snap its wings, but apparently only during the rapid, steep swoops of its low, erratic, territorial alarm flight (NB that ZITTING never produces snaps).

Habitat is short grass on open dry ground; altitude range sea-level to 1800 m. This species is widespread on the grassy flats of the Athi, Kapiti and Emali Plains, and in Tsavo, Mara etc, also extending west and north to Kisumu and Marsabit (Britton, 1980).

Subgroup B

a) TINY CISTICOLA C. nana

There are 2 main points useful in the identification of this very small and short-tailed species. Firstly, its plumage is bright and distinctive :- prominent unstreaked pale reddish-brown to even orangish crown and nape, contrasting markedly with the grey to quite pale grey mantle and scapulars. At a distance, the mantle appears unmarked, but closer views show indistinct streaks of a slightly darker grey; note that Williams and Arlott (1980) illustrates a streaked mantle (ie Arlott's close-up artist's view of the skin), while the accompanying text states that this illustration should not in fact be streaked (ie Williams more distant birdwatcher's view of the bird in life). Dark subterminal spots on both surfaces of the tail, but most prominent ventrally. Ventral torso quite whitish unmarked, lacking any obvious buffish tinge, but with some dusky colouration along the flanks. Young birds browner on the mantle.

Secondly, the male habitually perches on and sings from the bare exposed topmost branches of tall bushes or trees, appearing in these situations as a "tiny white-breasted dark-backed bird" (Mackworth-Praed & Grant) with a prominent orange cap. When disturbed, it may fly down to low scrub or even the ground, but soon returning to the canopy and highest twigs again. When singing, the bird is motionless with the bill pointing up into the air. Mackworth-Praed & Grant describe the song as "sharp whistled notes preceded by 6 small clicks, 'tic-tic-twee-click-click' repeated at intervals, while I noted it as rather like a dry lisping version of the 'slow galloping' of the Yellow-breasted Apalis, Apalis flavida. Display consists of 'cloud-scraper'-type sudden swerves on whirring wings, but carried out at low level, near the ground.

This is a bird of the arid and semi-arid plateau of Kenya, altitude range 300-1300 m. Thus it ranges through the dry Acacia bush and woodland, in areas like the lower slopes of Mt Marsabit, Meru National Park, and Tsavo East and West. Nearer to Nairobi, it can be found in the thornbush of the Magadi road and at Magadi itself, and along the old road from the Magadi Road to Kajiado.

b) TABORA CISTICOLA C. fulvicapilla

There are 2 main aids to the identification of this species. Firstly, this is a bird of the extreme west of Kenya, only being reported from Masai Mara (Mann, 1974), Muhoroni and Kendu Bay. D.A. Turner (pers. comm.) gives Cottar's Camp in the Mara as a good locality.

Secondly, it is distinctive in appearance. Plumage-wise, it resembles the TINY, with unstreaked pale grey to grey mantle contrasting strongly with the unstreaked bright reddish to orange-rufous crown and nape; ventral torso also whitish; young birds generally browner above, with no ventral yellow. But it is radically different from the TINY in that the tail is long, very thin, and Prinia-like, in fact decidedly thinner than that of a Prinia, and frequently cocked upwards (tail a little shorter in non-breeding plumage).

Birds in Rwanda were in parties of around 5 individuals in Acacia bushed grassland, ranging from quite high in the Acacia trees down to branches at grass level and even on to the grass. Habitat is summarised as "tall grass and bushes in open bushland and woodland"; sea level to 1400 m.

Song is delivered from a bush or treetop and is a monotonous, rather Tinker Bird-like "keep-keep-keep-", 10-30 repetitions, at c2 per second; also a harsh clicking rattle alarm note.

c) FOXY CISTICOLA *C. troglodytes*

I have no field experience of this species, but it seems to be readily identifiable by 2 factors. Firstly, its unique plumage: unlike any other species from East Africa, the crown, mantle and wings are a uniform bright to dull foxy russet brown, with no streaking, while the ventral torso, with the exception of the chin and lower belly, is washed a rich warm buff. The dorsal tail is blackish or very dark brown, and lacks subterminal spots. Young birds duller than adults and yellow below.

Secondly, its range in Kenya is restricted to the northwest, with Britton (1980) quoting "W Turkana, Pokot, the Cheranganis and Mt Elgon (up to 2200 m) ".

Accounts of its habitat name wooded or bushed grassland, with Mackworth-Praed & Grant noting that it is equally likely to be found in the trees or the grass. They also make the point that it is an extremely unobtrusive species and that it only infrequently utters "a few nondescript and whispy little call notes" from a treetop perch. Thus very distinctive, but easy to overlook.

d) SIFFLING CISTICOLA *C. brachyptera*

This species is similar in appearance to the members of Subgroup A. It is a bird of "bushed and wooded grassland, open bushland and grassy clearings in woodland from sea-level to 2200 m" (Britton, 1980). It has been seen in song (December) around Sosian Gorge in Nairobi National Park, while Skinner (1977) notes it in "open areas in forest valleys" in the Park. Towards Thika, it occurs in the long grass and bushes of the nature reserve at Kenyatta University College (May - June), and in thickly bushed grassland around the Blue Posts Hotel (on the main Nairobi - Thika road). Both Britton (1980) and Mackworth-Prard & Grant comment on its wide-ranging and common status, so that the lack of records of sightings from most birdwatchers must reflect its archetypal nondescript 'small brown bird' appearance.

Hence the main point to be made about SIFFLING is its dull and uniform plumage. Thus, from a typical Nairobi field description : "upperparts brown, possibly slightly grey-brown; crown dull brown, thinly streaked dark; mantle as crown, with thickish dark streaks; rump plain grey-brown; no contrast between crown, mantle and rump (though crown can be a little browner than the mantle A.D.L.); dorsal tail same colour, with dark subterminal spots.". Ventral torso white, tinged buffish particularly on the flanks, and at times with a distinct paler throat. No contrasting patch visible in the closed wing. Tail of medium length, ie definitely not stumpy. Young birds yellowish below.

But the bird does have distinctive habits. While often drab and unobstrusive in long grass, it will at all seasons fly up to a bushtop or tree if one invades its territory. In addition to this, the males sing from the very tops of small trees, but are unobstrusive even in this exposed position due to their still nature, quiet song, and small silouetted form. The distinctive but quiet wispy song, the origin of the bird's pitiful name, is "a short chirruping or siffling twitter, best described as 'mississippi - ing" (Mackworth-Praed & Grant); it struck me as "a continuously repeated soft lisping 3-note whistle, slightly descending"; difficult to describe, but distinctive when heard. Mackworth-Praed & Grant also note the male as occasionally rising high into the air, and performing a circular, high aerial cruise, followed by a "bullet-like dive" to earth.

This nondescript and streaked species can be seperated from the similar members of Subgroup A as follows: perched song and nature of song eliminates all Subgroup A; tail too long for 'stubby' WING-SNAPPING and PECTORAL-PATCH; absence of radical sexual dimorphism eliminates PECTORAL-PATCH; absence of prominent bold crown streaks eliminates all Subgroup A except male PECTORAL-PATCH (which has plain, bright brown-buff crown, that contrasts with the mantle); dorsal tail pattern eliminates WING-SNAPPING, PECTORAL-PATCH and DESERT.

Additional references

Heinzel, H., Fitter, R. & Parslow, J. 1974 The Birds of Britain and Europe with North Africa and the Middle East. Collins, London.

Peterson, R., Mountford, G. & Hollom, P.A.D. 1974 A Field Guide to the Birds of Britain and Europe. Collins, London.

Skinner, N.J. 1977 EANHS Bulletin, March/April.

Correction to Part 1

Various apparently totally committed afficionados of the genus have written in to point out that, while Turner (1977) undoubtedly deals with the East African endemic bird species, he nowhere mentions HUNTER'S as I hinted in part 1, and thus is it endemic ?, do I really know what I am grinding on about ?, etc. etc. In fact an editorial error omitted this species and Moreau's Sunbird from the article in question, but their write-ups can be found in Scopus, 1, 56

Adrian D. Lewis, Dept. of Geology, P.O. Box 30197, NAIROBI

SOME FACTS ABOUT THE BREEDING BIOLOGY OF THE GROUND HORNBILL

In the course of a four-week stay at Tsavo West National Park from 3rd November 1981 to 3rd December 1981, I had an opportunity to study two breeding communities of the Ground Hornbill Bucorvus cafer. Both nests were in holes in trees, and were located sufficiently close to the road to allow me to observe them for several hours each day without getting out of the car. For the sake of convenience, I christened each community according to its location, the "Baobab Hornbills" and the "Kilaguni Hornbills" respectively.

The Baobab community consisted on one female and two adult males. I was able to distinguish the males by the different size of their throats. The Kilaguni community consisted of one female, three adult males and two immature birds; one of the latter being in a transitional stage as evidenced by the changing colour of its face, ie from yellow to red. I could distinguish the three adult males by differing white patterns on their bills.

Location of Nests

The nest of the Baobab hornbills was situated in a hole in a baobab tree about 13 m above ground and 30 m away from the road. The surrounding vegetation consisted for the most part of shrubs and bushes but an area of open grassland surrounding a waterhole was not far away.

The Kilaguni hornbills' nest was in a hole in a dead tree about 6 m above ground. The tree was on a slope at the edge of a lava flow. Directly beside it there was a patch of grassland and a seasonal waterhole which gave way to open bush. The distance to the road was about 100 m.

Feeding of the Females

When I first discovered the nesting holes in the beginning of November, both females were incubating their eggs. In each case the males were assidious in feeding the females, coming to the nest with food about five times a day (every two or three hours).

In the case of the Baobab hornbills the males always arrived with food simultaneously. On arrival, they landed on a branch opposite the nest. Then they each in turn flew to the nest, dropped their prey and then returned to the branch to rest and preen themselves for some minutes.

I noticed that it was always the same male which took first turn to deliver its prey to the female. As soon as the males landed and during the time she was being fed, the female uttered begging noises. When the feeding was over the female then sometimes came out of the hole and either flew away with the males or followed them shortly afterwards. The female did not stay away for long however, three quarters of an hour was the longest period I observed.

In the case of the Kilaguni hornbills the feeding ceremony was similar, except that although both the males and the immature birds would go hunting together, not all of them would return with food. However, there were always at least two birds which brought food on any one occasion. It was noticeable that the youngest of the two immature birds collected the least food. All five birds would arrive at the nesting site together, including those that were not carrying food. They would first land on the lava bed nearby and would deliver food to the female in turn, before flying to their feeding grounds.

After the middle of November the young of the Kilaguni hornbills hatched. On the 19th I saw the female leaving the nest and returning with food; but even so she continued to spend most of her time in the hole, leaving it to the males to collect the bulk of the food. The female would only join the males for a while after they had come to the nest, and soon return alone to the young. She was the only one to actually enter the hole and stay inside.

I once observed the female being fed by two males away from the nest, while she was sitting in a tree. In this case the males had already collected food and were about to fly to the nest, but the female joined them in their tree before they could do so. Two of them fed her while the third flew to the nest and fed the young.

On another occasion, the female was fed by the two immature birds and one adult while she was out hunting with them.

Method of Food Collection

I was also able to observe the Kilaguni hornbills while they were foraging for food. I noticed that they mainly fed on locusts, various kinds of grasshoppers and beetles, but scorpions were also on their menu and I once observed them catching and eating a chamaeleon.

The hornbills have an interesting way of collecting their food. They will first lame their prey (e.g. a grasshopper) and will then proceed to carry it in their beaks until such times as they find other prey. Then they temporarily abandon the insect they first caught and deal with the new one in the same way. The hornbill then picks up both its first and second victims and continues in search of further food. The procedure is repeated up to a maximum of six times.

I once noticed a hornbill turning back to pick up an item of prey which it had earlier forgotten.

For reasons which are not at all clear, the hornbills have a habit of collecting dead leaves from underneath nearby bushes. This they do often, immediately after they have finished collecting their prey. They thus end up with a mixed 'cargo' of leaves and insects. In all probability these leaves serve as nest lining, but it was interesting to observe that they continued collecting leaves even after the young had hatched.

The same behaviour was noticeable in the Baobab hornbills.

Social Behaviour

While observing the hornbills I was also able to get some insight into their social behaviour. Both communities of birds groomed each other and males and females were 'duetting' with each other.

In the case of the Baobab hornbills, I once observed the female leave the hole after being fed and join the males in the tree, First they preened each other then the female started to exchange calls with the males for about 15 minutes. The males always answered the call of the female in unison.

The Kilaguni hornbills could be heard in the early morning just before dawn and in the evening. Here only one male at a time was entered into 'conversation' with the female. Often they were all sitting in the same tree preening themselves while this went on.

Conclusion

These observations can only give a very little information on the breeding behaviour of the Ground Hornbill. Many questions still remain, but it would take some years of study to answer them. One very interesting question concerns the composition of a hornbill community: do all the birds help in rearing the young including the young adults from previous hatchings ? If this is the case, then we would have another example of kin-selection. I hope we will be able to solve this problem one day.

Angelika Hofer, c/o Dept. of Ornithology,
P.O. Box 40658, NAIROBI

NOTES FROM MASINGA DAM, TANA RIVER

At this stage in its development, obviously little is known of the potential of this enormous stretch of water as an ornithological paradise. This it could be in the future, as the sudden appearance of a large new 'lake', where none existed before, is bound to have a startling effect on all water loving birds.

Due to possible miscalculations, the Dam had to be lowered considerably to enable the completion of a new bridge to proceed. For a short time, however, land below the power station was flooded, permitting the massive silt and mud that flows down the Tana to settle both above and below the bridge. When the water level was lowered, the resulting mud flats appear to have created a startling attraction for waders and ducks of all kinds.

On 8th December 1981, on one of these new mud flats, a few hundred metres below the bridge, where it crosses the main Thika Sagana road, we counted possibly a thousand ducks and waders resting there - all on a very small area of exposed mud, not more than approx. 75 m x 30 m. We were just too far away to be able to identify all the species, but we confirmed Fulvous Whistling Duck, *Dendrocygna bicolor*, White-faced Whistling Duck, *D. viduata*, Yellow-billed Stork, *Mycteria ibis*, Pink-backed Pelican, *Pelicanus rufescens*, Great White Egret, *Egretta alba*, Cattle Egret, *Bubclcus ibis*, and many species of waders.

Once the Dam is raised again to its normal level, these flats will, of course, disappear, but there will be many islands and a vast shore line, that should provide a superb new 'bird place' for us all ! Possibly, it is not too soon, even before all works have been completed, to start discussions with E.A.P. & L. as to its future along these lines ?

Peter Davey, P.O. Box 15007, NAIROBI

NOTES ON THE SILVERY-CHEEKED HORNBILL

Between 26th July and 1st November 1981, a flock of Silvery-cheeked Hornbills, Bycanistes brevis, flew regularly over our Loresho South garden, Nairobi. A maximum of seven were seen on their outward journey, westwards, at between 0727 and 0855 hrs. The return flights passed over between 1529 and 1830 hrs - depending to some extent on the weather; the clearer the sky the later the birds passed overhead. The majority of the return flights were between 1735 and 1825 hrs.

The birds did not fly as a single flock, but were spread out in groups varying from 1 - 10 in number. The time between the first and last birds averaged about 7 minutes with a maximum of 25 minutes.

The average number of birds making the return trip, from somewhere in the grounds of the Wellcome Centre, was 17 birds, with a maximum of 48 on 6th September and a mimimum of 0 on one day when it rained all day. On one evening, 17 birds were seen circling over the tall trees in the vacinity of Loreto Convent, some 30 minutes after passing overhead.

This rather slow progress suggests that they are not particularly strong fliers, and when passing through they would stop for rests in the tallest eucalyptus trees before leaping off and flapping madly to the next group of tall trees.

On only three occasions were they heard to call and once, five birds were mobbed by three Pied Crown, Corvus albus.

I await their return next July.

David Trump, P.O. Box 25209, NAIROBI

CARACAL IN THE ABERDARES ?

Several reports have been received recently of Caracal, Felis caracal, in the Salient of the Aberdares. This is out of the normal habitat for the species; Dorst & Dandelot in their Field Guide to the Larger Mammals of Africa record that it is never found in dense forest.

Any authenticated records would be most welcome. Please send full details to The Secretary, EANHS, P.O. Box 44486, Nairobi or Mr I.W. Hardy, The Ark, P.O. Box 449, NYERI, Kenya.

ANNUAL GENERAL MEETING

The 72nd Annual General Meeting of the East Africa Natural History Society will be held in Nairobi on Monday 8th March 1982 at 5.30 p.m. in the Museum Hall.

Nominations for office bearers and members of the Executive Committee as well as notices of matters to be included on the agenda should be sent to :

The Secretary, EANHS, P.O. Box 44486, Nairobi
to reach her no later than Monday 15th February 1982.

FIELD TRIP TO HELL'S GATE, NAIVASHA

About 20 members met punctually at the Lake Hotel, Naivasha on 6th December 1981, and drove at once to Fischer's Tower, at the northern end of Hell's Gate or Njorowa Gorge. There they heard at length about the geology of the sights surrounding them, the speaker ranging from bland assertions on the movements of the east Kenya-Somalia block and the formation of the Eastern Rift Valley, to more detailed and demonstrable statements on the recent geology of the immediate vacinity. The origin of the Gorge itself was discussed, while Fischer's Tower and the adjacent rock colums were described as volcanic necks, through which molten lava had once ascended from the interior of the Earth to the surface. The revelation that Longonot volcano (just visible to the party) had erupted within the last century and thus was, in theory, capable of doing so again at any time, was met by plainly incipient hysteria by some of the more excitable members, his condition being scarcely alleviated by the considerations that (a) this was in fact improbable just at that particular moment, and (b) that, should it in fact come to pass, it would at least serve to strengthen the speaker's point. Certian lady members exuded barely concealed anticipation when the speaker proposed taking the party off a little way to show them a very intriguing exposure, only to be disappointed when they got there to find that he was still talking about rocks.

During all this, a fine adult Augur Buzzard, Buteo augur and a couple of immature Steppe Eagles, Aquila nipalensis were hanging over us, motionless in the powerful updraughts produced by the blast of the strong north wind against the cliffs. This wind hindered observation of small birds throughout the trip, in particular probably rendering even more obscure than usual the Wailing Cisticola, Cisticola lais, which is usually to be found on the bushed screes at the sides of the gorge.

We moved down the gorge to directly below the main 400 ft. cliff to examine the columnar cooling contraction cracks in the lava at close hand, and to watch vultures flying in to their roost perches. Excellent views were obtained of Ruppell's Vulture, Gyps rueppellii, both perched and in flight, and there were prolonged opportunities for contrast with immediately adjacent White-backed Vultures, Gyps africanus, the seperation of these two species in flight often poses a problem. A Lanner, Falco biarmicus, Egyptian Vultures, Neophron percnopterus and Verreaux's Eagles, Aquila verreauxi were also in clear view. Several Speckled Pigeons, Columba guinea were on the cliffs, and their deep "hoo-hoo-hoo-" filled the air. Many people were hoping for a view of Lammergiers, Gypaetus barbatus that until recently habituated this huge main cliff, but the birds have shifted their nest site further down the gorge (Museum Avifauna News, October 1981) and thus were not seen.

Several of the party spotted greater numbers of vultures perching on cliffs to the south, and so we moved down there, passing on the way a few Zebra Equus burchelli and Kongoni, Alcelaphus buselaphus cokii: aren't animals in some way always more real outside of the National Parks ? We left the cars and moved under this second vulture roost, whereupon about forty of the great birds launched out from the cliff face to hang inquisitively above us, in the company of two immature Tawny Eagles, Aquila rapax. Excellent views were again obtained of the perched Ruppells, including their generally speckled plumage and large pale bills. Hopes were still held for Lammergiers but, despite some peculiar soaring silouettes of the Ruppells, in vain.

This southern cliff was also of further geological interest. A massive comendite lava could be see to be overlaying an agglomerate, with a thick black band of obsidian glass developed where high temperature lave had flowed over the cooler ash and chilled against it. On the other side of the valley, solid bluffs of this lava rest on and contrast sharply with much more gullied outcrops of the more friable and easily weathered volcanic ash.

Most of the party had already left for the cars when three Klipspringers, Oreotragus oreotragus, were spotted moving unobtrusively above us, along the top of the grassy scree at the base of the cliff. But those members already back at the cars were informed, and everyone obtained at least distant views of this specialised and often elusive 'rock antelope'.

The party left the area at about 6 pm after a rather brief and windy but still worthwhile trip. The new upper rift road being blocked, it then required merely a rather macabre sense of humour in order to appreciate what can only have been the fated conjunction of darkness, the twisting road up the rift escarpment and.....a combine harvester.

Adrian D. Lewis, Dept of Geology, P.O. Box 30197, NAIROBI

CAMP AT SAIWA SWAMP, 11th - 13th DECEMBER 1981

"Where are you going this weekend ?"
"To camp by a swamp."
"Interesting ! What for ?"
"To see the Sitatunga and spot birds."
"Fascinating ! What is this sit------ thing ?"
"A rare aquatic Kenyan antelope."
"Really - where is this place ?"
"North of Kitale via the Naivasha, Nakuru, Eldoret road."
"Hope you make it. See you next year, maybe !"

So went a casual conversation with a non convert of the Natural History Society. Was I really going to enjoy it with all that rough riding to get there ? The prospect of being bitten to death by mosquitoes and the possibility of losing three children in a swamp which is reported to be bottomless !

We arrived in one piece and the attractive camp site with new mess and choo tents, beds, blankets, tables and chairs for our use, and a pleasant camp staff, was all most inviting. Why had we been so apprehensive ? Tim and Jane Barnley came on the Friday evening to welcome about eight groups of campers. At first they shattered our thoughts of a pleasant weekend with warnings about puff adders which attack on sight, two large pythons that live in the swamp and cobras which abound but usually wriggle away. The first evening campfire was established under the light of a full moon and by then the unusual absence of flying insects was pleasently noted, but it was cold as the swamp is at 7200 feet (2196 m for those who have succumbed to the metric conversion).

By this time a number of members had already done a bird recce which proved very rewarding, including sightings of Black-billed Weavers, Ploceus melanogaster, Black and White Casqued Hornbills, Bycanistes subcylindricus, Blue Flycatcher, Erannornis longicauda and numerous little brown jobs which would need closer investigation. A number of magnificent pairs of Crowned Cranes, Balearica pavonina, with young and a pair of Wattled Plovers, Vanellus senegallus, on the swamp provided further interest. An evening watch from one of the many roughly constructed wooden platforms sited very high in the trees bordering the swamp revealed at least 17 female and 3 male Sitatunga, Tragelaphus spekei feeding on the vegetation of the swamp. A good start to the weekend.

The cold night turned into a dazzling sunny dawn rapidly drying out the dew filled grass and producing a rising mist from the swamp which comprises an assortment of higher vegetation, largely stands of bulrushes, reeds and sedge, intersperced with a mass of lower vegetation mainly Hydrocotyle ranunculoides. A fast flowing central stream course winds its way through the swamp and this is bordered by areas of flat marshy ground and surrounded by a large thick tree cover along the perimeter. The whole effect was one of a lush green kaliadescope of colour except for the odd dead tree in the centre of the swamp which provided useful perching places for the birds. The early morning soon set the place alive with birds and such species as the very attractive Brown-capped Weaver, Ploceus insignis, a host of sunbirds including numerous Northern Double-collared, Nectarinia preussi, the very similar Olive-bellied N. chloropygia and the Green-headed, N. verticalis and the more common Collared, Anthreptes collaris, Variable, N. venusta, Bronze, N. kilimensis, together with a number of Ross's Turaco, Mussophaga rossae, filled the trees with life and colour. By 1100 hrs the sun was becoming unbearably hot both for birds and humans and the latter retired to the shade of awnings and acacia trees. We checked sightings against the Barnley's list which contains over 300 species seen at the swamp and to read the most interesting report produced by Rosemary Owen on the Sitatunga in Kenya (East African Wildlife Journal 1970, 8, 181-195). A pair of Eastern Grey Plantain Eaters, Crinifer zonurus, provided a raucous chorus around the camp during this siesta period.

There are numerous walking tracks around the swamp through the thick tree cover in which many members easily lost themselves to the quiet seclusion of isolated birdwatching, and others availed themselves of the expert spotting eyes of the local guides, who it was claimed could spot a chameleon 50 feet up a tree !

The swamp is approximately 6 km in length and ranges from 90-360 m wide, being spanned in several places by rickety wooded bridges which make the Naivasha/Nakuru road seem like a modern highway.

The second campfire on Saturday night was well attended and good use was made of wood supplied by the staff to reduce the effects of an even colder night. Conversation ranged from safari tales of Tanzania, Zambia and Kenya to the constellations of the night sky above; we will certainly need an astrologist on the next trip !

Sunday morning was as sunny as before and early risers added more interesting bird species to the list before breakfast. These included Broad-billed Rollers, Eurystomus glaucurus, Double-toothed Barbets, Lybius bidentatus, Grey-throated Barbets, Gymnobucco bonapartei amd a number of Yellow-rumped Tinkerbirds, Pogoniulus bilineatus. Throughout the day many members relunctently drew up tent pegs to leave and by evening only three groups remained. During the weekend a good number visited Mount Elgon which is only one hours ride away and enjoyed the heavily forested area in which large troops of Colobus Monkeys, Colobus abyssinicus and Blue Monkeys, Cercopithecus mitis, were seen.

Monday marked the last day and the early birdwalk produced more species including Splendid Glossy Starling, Lamprotornis splendidus, Brown Parrot, Poicephalus mayeri, a nesting Great Sparrowhawk, Accipiter melanoleucus and a pair of noisy Wattle Eyes, Platysteira cyanea around the camp, bringing the grand total of bird species seen to exactly 100, the full list is available in the Society's office for those interested.

I am sure those members who made the effort to attend this camp would join me in thanking our hosts, the Barnleys, and the camp staff for their expert help and assistance in making our short stay so very enjoyable.

By the way, I wrote to my colleague who doubted my state of mind in attending such an outing and simply said, "Wish you were here - it is great."

Clive Briffett, P.O. Box 52428, NAIROBI

BOOK REVIEWS

Sand Rivers by Peter Matthiessen, colour plates by Hugo van Lawick. Collins, London, 1981. U.K. price £9.95.

Without question the Selous Game Reserve, covering more than 22,000 square miles of south eastern Tanzania, is the greatest wildlife sanctuary in Africa. It is not just one ecological unit but a whole series of totally self-contained units with its miles of miombo (Brachystegia) woodlands, its riverine forests, its valleys and grasslands and above all its great rivers and super-abundant water supplies.

It is a reserve essentially created by two men - C.J.P. Ionides and his pupil and successor Brian Nicholson. It still remains the least known reserve of all - a true African wilderness - a wilderness of total enchantment. Here is the greatest Black Rhino population of Africa living amongst a vast number and variety of other wildlife. Its numbers of elephant are great.

Towards the end of the dry season on 1979 Peter Matthiessen, with Hugo van Lawick as photographer, went on a safari arranged by Brian Nicholson. The first part of the safari was highly organised with four-wheel drive vehicles and air support. But for the final ten days Matthiessen and Nicholson set off on a genuine old fashioned, but light, foot safari with Goa, one of Nicholson's former head game scouts as gun-bearer, Kazungu as cook and six young Wangindo lads as porters. Their safari was towards the southern end of the reserve between, and along, the Luwegu and Mbarangandu rivers, the real heart of the Selous.

Matthiessen writes with deep perception and charm. His words bring alive the great beauty of this countryside, its animals and birds and a total realisation of what so many parts of Africa once were but no longer are. The constraint between himself and Nicholson, until they finally understood and appreciated each other, is an underlying theme.

The colour plates by Hugo van Lawick are, as you would expect of him, superb. These are not pictures of Serengeti lion on the open plains but the animals of the Selous and the country. Study them carefully and look at them time after time. Look at the backgrounds for they will give you an idea of what the Selous is really like.

I have already said that this is the greatest wildlife reserve in Africa. But a wildlife reserve today needs management. It needs rangers patrolling the bush from their outposts throughout the reserve and throughout the year. It needs roads and vehicle maintenance but above all it needs regular, controlled early burning of the tall, rank grasses of that high rainfall area. unless this burning is done the grazers lack tender grasses they need and they diminish in numbers. The bush thickens. These are the services which Nicholson as Warden of the Selous used to supervise. Since Nicholson's departure these services have collapsed and Matthiessen makes this clear.

Today there exist many para-statal organizations and a multitude of conservation societies headed by the World Wildlife Fund. To me, as one who has been privileged to know the old unspoilt glory of Africa, this is an area on which I would have expected them to concentrate great effort, if only to protect a viable black rhino population. But do they ?

This book is superb. It should be read by everyone, the sophisticated city dweller as well as the nature enthusiasts who would love to see the Selous but who find it hard to penetrate. Above all it should be read by Tanzanians, for on them rests the fundamental responsibility of safeguarding this great treasure of their natural heritage.

Between 1937 and 1951 I was stationed as an administrative officer in eight districts, each of which took in a part of the Selous Reserve within its boundaries. I walked those parts. In November/December 1950, at the very end of the dry season, I did a thirty day foot safari in the Mbarangandu region at the southern end of the reserve. For twenty eight consecutive days I did not see a human being other than the members of my safari team nor any sign of human activity. Sand Rivers has evoked in me a deep nostalgia, a longing once again to walk delicately and with care through the riverine forest, to follow the sandy elephant paths under the shade of the miombo and in the evening to lie in the shallows of the Mbarangandu river and let its crystal clear water trickle over me. For this nostalgia I can only thank Peter Matthiessen and Hugo van Lawick for producing such a magnificent book.

Eric Risley

Secret Eden by Eric Robins, photographs by Marion Kaplan. 1980. Elm Tree Books/Hamish Hamilton, London. U.K. price £8.95

This is the second book on the Selous Game Reserve of Tanzania to be published recently. The author, Eric Robins, is no new-comer to East Africa. Having resided here as a journalist for more than ten years, he has had wide opportunity to acquaint himself with the region's natural history. The opportunity does not appear to have been taken if Secret Eden is anything to go by.

The style of the book tends to "flowery inane" ("Under an implacable sky, a brooding silence hung over a blanket of golden grass which stretched...."etc). However its most prominent feature is the shallowness of the research which went into producing it and the numerous inaccuracies which follow in consequence. Careless statements appear on page after page : "Where the earth's crust was thin, sulphurous hot springs bubbled...". Was the earth's crust "thin" ? Is it not likely that the springs bubbled through a fissure in a "thick" earth crust ? Selous was not "the greatest elephant killer of his time". He killed some hundreds of elephants, true, but others have exceeded his scores substantially. However this lack of accuracy becomes particularly irksome where natural history is concerned.

Porcupines are not "enemies" of aardvarks. The aardwolf (Proteles) is not related to the jackals or any other canids. The species has well developed anal glands and marks its territory with the secretion therefrom. However, according to Jonathan Kingdon this secretion does not have an unpleasant smell. Robins' claim that the aardwolf emits a vile-smelling liquid in the manner of a zorilla in incorrect. Catfish do not hibernate in river mud during dry seasons: lung fish do. Further the term more appropriate in the circumstances is aestivate. The "griffin" Robins saw in the Selous is truely a land mark, for according to the Oxford Dictionary this was a "Fabulous creature with eagle's head and wings and lion's body." Perhaps he was referring to a griffon (Ruppells ?). According to Mackworth-Praed and Grant Secretary Birds have "A triple reedy clarionet-like note" and do not grunt like a lion. Trumpeter hornbills are not birds of hot acacia country but of forest and gallery strips. Ground Hornbills may look superficially like turkeys but not like deformed turkeys and they can fly quite strongly. Robins claims that they can rarely get off the ground. A Kori Bustard is indeed a big bird, but it does not stand five feet tall. Sunbirds do not occur on the alpine moorland of the Selous because there are no alpine moorlands in the reserve. Pratincoles are not larger than Long-tailed Cormorants. While Giant Kingfishers are birds of Kenya's highland streams, they do not occur among the mountain rivers and streams of the Selous for there are no such habitats there. However, the species does occur there on the larger rivers, behaving very much like a Pied Kingfisher. Vulturine Guineafowl are not supposed to occur in the Selous. The Spotted Eagle Owl looks like nothing so much as a large owl. The description: "Oddest of the nocturnal birds....had the body and plumage of an eagle but the head....of an owl" and "seems to be a rare cruel joke of nature" is as amazing as it is inaccurate. Claiming to have been unnerved "on a black night in the Selous wood" from hearing "the thrum of wings followed by a maniacal shriek" in description of a Barn Owl seems straight out of a schoolboy essay ! Of all birds, owls are least likely to have "thrumming" wings ! The observation "that each (crocodile) had a small white bird, an egret, picking its rapier-sharp teeth for scraps of fish" seems a straight fabrication.

So much for accuracy. There is a great deal more in Secret Eden which is mistaken. The author does not only report what he has been told inaccurately, but also makes one suspicious about what he claims to have seen himself. The clue to the structure of the book lies in the bibliography at the end. It is my guess that having read the fourteen books listed, made a relatively short visit to the Selous and talked to several people who knew the area, the author assumed that he had sufficient expertise to describe this great game reserve. It was a false assumption.

Ian Parker

Review of the Photographic Content of Secret Eden by Eric Robins with photographs by Marion Kaplan.

Quite frankly, I was disappointed.

Marion Kaplan's ability and experience as a photographer appears to have been sadly misused and mis-represented throughout much of the book.

There is everything from 'brilliant' to 'low grade snapshots' and it is a pity that the low grade stuff detracts so badly from the brilliant.

Glaring errors of description do not help either. Facing page 25.."Elephant among strange borassus palms....". This is inexcusable as the palms are no more Borassus than Xmas trees - they are Doum (Hyphaene spp).

Another comment I find hard to understand, is that attached to the black and white picture of an Emerald-spotted Wood Dove on page 84. If this little bird is photographed in colour, as it is seen with our eyes, there is no question of it "toning into the background" !

From my own experience, I know full well that bad printing can ruin a good photograph, and it is possible that some of the faults, perhaps many of them, can be blamed on the publishers, but one does tend to ponder on the choice of some of the photographs.

The Kongoni, facing page 117, the Giraffe nursery, facing page 105, are just bad pictures. The Goliath Heron, in colour, on page 78, shows the worst aspects of using a mirror lens, excessive and irritating "vignetting", that creates blurred spots of light where there should be just out-of-focus flowers. These are just a few.

Compared with such magnificent photos as the butterflies, some of the aerial shots, the highly descriptive old grain mill, most of the flowers and plants (both black and white and colour), the Egrets facing page 82, and the superb capture of the giant Sterculia tree on page 70, I found it somewhat sad that Marion Kaplan's experience and talent do not appear to have been used to the full.

Peter Davey

Collins Handguide to the Butterflies of Africa by R.H. Carcasson. Collins, London 1981. U.K. price £4.95

This is a soft-cover guide to 354 species out of the more than 3000 recorded from Africa. These are all illustrated in colour, sometimes with their early stages, made from excellent drawings done by the author.

As is usual with Carcasson, the quality of the illustrations in superb, making identification of the species figured very easy. He also gives a much better balance than John Williams in his Field Guide to the Butterflies of Africa, including 108 species of Lycaenidae as against 51 in Willaims. He is also much more restrained on the 'prerry-pretties', including only 18 species of Charaxes, whereas Williams includes practically every species other than the more difficult black ones.

Having said that, a couple of small critisims on the book. It is a shame that the soft cover edition does not include the list of all the species and subspecies recorded from Africa which is included in the hard cover version, but I suppose the soft-cover is aimed at the more general reader.

The other, more serious point, is that several times the subspecies or species used in the illustration is of very limited distribution and the more common or more wide spread is not mentioned. To take a case in point, under the Euphaedra group, the subspecies neophron is used as the southern subspecies (which is green) but no mention is made of the East African subspecies littoralis (which is purple) though a large number of the people using the book will be tourists at the Coast where littoralis is very common. Three of the other species of Euphaedra are confined to the very far west of Africa (Sierra Leone to Ivory Coast) leaving only two of wider distribution, though there are a large number of species in the genus covering much of the middle of Africa, say from Ghana to Uganda.

As is always the case, the bugbear of common names raises its head. I do not like common names as they can be confusing. Here we see this in operation on several occasions, though the most obvious one concerns Precis, the Pansies. Williams has the Blue Pansy as Precis oenone, Carcasson as Junonia orithyia, while Carcasson calls Junonia oenone the Black Pansy while Williams Precis orithyia the Eyed Pansy !

A very good book for the beginner and I have no hesitation in recommending it to anyone who wishes to understand a little more about the butterflies of Africa. As Carcasson says in the introduction, "This book is not intended as a guide to the identification of African butterflies, but as a simple introduction to their variety, beauty and great interest."

Mike Clifton

(The Society hopes to obtain copies of this book for sale in the near future, orders can be placed through the Secretary. Ed.)

WANTED

Upland Kenya Wild Flowers by Agnew, one copy in any condition. Please contact J. Beckett, c/o J.B. Gillett, The Herbarium in the National Museum grounds.

Secretary/Bookkeeper - Kenya citizen secretary/bookkeeper who would enjoy living/helping on a homely, isolated Laikipia ranch. Moderate family. Free house and considerable perks. Please contact Mr I.G.P. Grant, El Karama Ranch, P.O. Box 172, NANYUKI, telephone Laikipia 34Y2.

House Exchange/Warming - for July and/or August 1982. Family of four wish to exchange very comfortable house in London for similar in Kenya. Car, trailer and camping equipment available. Please contact M. Charleston, Banda School, P.O. Box 24722, Nairobi.

Book Dispatcher - due to the increased volume of sales of books from the Society's office, the Secretary would be grateful for some help with handling these. The job would entail wrapping and posting copies of Birds of East Africa and Breeding Seasons of East African Birds to overseas destinations and would take about one morning a week. Any member interested is asked to contact The Secretary, P.O. Box 44486, NAIROBI.

Journal Editor - After many years of voluntary work, Jean Hayes is retiring as the Hon Editor of the Journal of the East Africa Natural History Society and National Museum.

Any member who is interested in taking over as editor of this prestigeous and well known scientific journal is asked to contact The Secretary, P.O. Box 44486, Nairobi as soon as possible.

WANTED KNOWN

Schooling - Tigoni Academy for Girls is opening in January 1982. This is a private boarding school for girls which does accept a limited number of day pupils. The school is sited on twenty acres of land at 7.000 feet overlooking tea estates in the Tigoni (Limuru) area. Headmaster - Duncan (Pat) Kelly, B.Sc., F.R.G.S., Private Bag, LIMURU. Telephone Tigoni 323.

FOR SALE

Walking Shoes - almost new (broken in) walking boots from La Robusta (Italy), ideal for rough hill walking and scrambling. Size 42 (8). Price Shs 650/-. Please contact J. Chr. Loeuwenburg, Riara Gardens, Nairobi, telephone 568606.

Camera Lenses - Mc Rokkor 50 mm 3.5f Macro lens - Shs 1,500/- and Mc Rokkor 16 mm 2.8f Fisheye lens - Shs 4,000/-. Both with bayonet fittings. Please contact Loefler, P.O. Box 24556, Nairobi, telephone 882630.

SOCIETY NOTES

1982 Subscription Renewals A subscription renewal form is enclosed for those who have not yet paid their dues. Once again we would like to thank all those who have paid promptly, it is of great help to the Secretarys. This is the last Bulletin which will be sent to those who have not paid their subscriptions, so if you wish to keep up with events on the natural history scene, renew now !

Important Notice to Overseas Subscribers Recent legislation in Kenya regarding foreign exchange procedure has made the following announcement necessary :

> All overseas subscribers are advised that they must remit their subscriptions in £ sterling, US $ or the equivelent in any convertable currency. If in the form of cheques, bank drafts etc. all payments MUST be drawn on overseas banks. All payments in foreign currency BUT drawn on Kenya banks can no longer be accepted, and if received, will be returned. Similarly, payments in Kenya shillings from overseas banks CANNOT be accepted, and these too, if received, will be returned.

The practical reason for this is that Kenya banks now make a minimum charge of forty shillings (equivelent to US $ 4.00) for handling foreign cheques and drafts if drawn either in Kenya shillings, or if drawn in foreign currency but through a Kenya bank.

Books - the following books are available from the Society's office in the Museum to members at reduced rates :-

Birds of East Africa, published by the Society and written by members of the Ornithological Sub-Committee. Covers habitat, status and distribution. Shs 130/-

Breeding Seasons of East African Birds by Brown and Britton, published by the Society Shs 80/-

Check List of the Birds of Kenya - Ornithological Sub-Committee Shs 10/-

A Field Guide to the Birds of East Africa, Williams Shs 175/-

A Field Guide to the National Parks of East Africa, Williams, the new edition with up to date species lists and new bird illustrations Shs 150/-

Useful and Ornamental Plants of Zanzibar and Pemba , by R.O. Williams, an essential book for those living on the coast, Shs 80/-. All the copies of this book which we have for sale are damaged as they have been stored in a warehouse in Zanzibar.

Faces of Kenya by David Keith Jones, an excellent book, particularly for those leaving the country Shs 260/-

African Hunter by James Mellon. Although most of the photographs in this very large book are of animals which have been shot, the text on each species is excellent, a book to be recommended Shs 150/-

Cradle of Mankind by Mohamed Amin, the story of Lake Turkana and its peoples. Only one copy remaining Shs 240/-

Aloes of Tropical Africa and Madagascar, Reynolds. A book which is difficult to obtain in Kenya but which the Society can still offer its members Shs 240/-

Some Well Known African Moths , a Bundu book, very good Shs 45/-

Second Hand, Out of Print Books

THE KILIMA-NJARO EXPEDITION H.H. Johnston 1886. One copy in excellent condition Shs 1100/-

A BRITISH BORDERLAND A.A. Wilson 1913. One copy in excellent condition Shs 380/-

BIRDS OF THE SOUTHERN THIRD OF AFRICA, 1962, 1963. Mackworth-Praed & Grant. As new in dust wrappers. Shs 1000/-

GAME BIRDS OF SOUTHERN AFRICA, P.A. Clancey 1967. As new in dust wrappers Shs 290/-

BIRD WATCHER IN KENYA van Someren 1958 Shs 170/-

HAMLYN GUIDE TO THE BIRDS OF BRITAIN AND EUROPE, Bruun & Singer. In good condition Shs 90/-

PROFIT AND SPORT IN BRITISH EAST AFRICA Lord Cranworth 1919 Cover slightly water stained, otherwise in good condition Shs 380/-

Book Expected Shortly

Collins Handguide to the Butterflies of Africa by R.H. Carcasson, reviewed on page 20 of this Bulletin. This excellent guide should be available shortly and orders are now being accepted through The Secretary, P.O. Box 44486, Nairobi. Price should be around Shs 85/- to 90/-

Location of Society's Office At long last, thanks to the National Museum, we have some descent office space and fresh air ! The new office is located up the back wooden stairs of the Museum, the two rooms on the right. Our move was completed in early January and we are now more or less organised. Office hours remain the same, from 0900 to 1145 and 1400 to 1545, and most Saturday mornings.

1981 Nairobi Bird Census The fourth Nairobi Bird Census which took place on 29th November 1981 in the Nairobi area was a great success. Due to the office move and the pressure of work with annual subscriptions arriving in floods, the analysis has not yet been completed, but all the figures will be published in the March/April issue of the Bulletin. Our thanks to all those who took part in this annual event.

Help Needed with Functions The Secretary is running out of ideas. Any member who can suggest a day trip, camp or an evening programme such as a lecture or film show is requested to contact The Secretary, P.O. Box 44486, Nairobi. If 12 members suggest a day trip, 12 a camp and 12 a lecture or slide show, we would have a complete years' programme, so please come forward.

Birds of East Africa Help is required for checking 3000 copies of this Society publication for printers errors. Any member who could offer a morning or afternoon to do this job is kindly requested to contact the Secretary as soon as possible.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Robert Graham Abel, P.O. Box 750, THIKA, Kenya
Mr and Mrs Andersson, P.O. Box 30592, NAIROBI
Mr Ingemar Attingsberg, Swedish School, P.O. Box 21324, NAIROBI
Mr and Mrs Barton, P.O. Box 223, KERICHO, Kenya
Mr John Brooker, c/o Aerodrome Training School, P.O. Box 19001, NAIROBI
Roger and Jan Chambers, P.O. Box 30715, NAIROBI
Mr J.E. Cokayne, P.O. Box 14784, NAIROBI
Alison J. Davey, P.O. Box 15007, NAIROBI
Finn A. Davey, P.O. Box 365, THIKA, Kenya
R.A. Davey, P.O. Box 15007, NAIROBI
Chiara Dolano, P.O. Box 526, MACHAKOS, Kenya
Anna-Elisabeth Glimm, P.O. Box 14050, NAIROBI
Manie El-Kindiy, P.O. Box 49206, NAIROBI
David H. Grey, P.O. Box 42011, NAIROBI
R.M. Greenshields, British High Commission, P.O. Box 30465, NAIROBI
Colin Gunson, P.O. Box 24674, NAIROBI
Barry Haack, Regional Remote Sensing Facility, P.O. Box 18332, NAIROBI
Henry Henley, Galana Game and Ranching, P.O. Box 76, MALINDI, Kenya
P.M. Hennah, P.O. Box 30157, NAIROBI
Dr and Mrs Hugh Lamprey, P.O. Box 21472, NAIROBI
Huguette and Don Lauzier, P.O. Box 24330, NAIROBI
Mrs M.E. Leakey, P.O. Box 24513, NAIROBI
James Lenahan, P.O. Box 30709, NAIROBI

John E. Lukens, P.O. Box 62474, NAIROBI
Mr B. Martens, P.O. Box 42134, NAIROBI
Mr Moore, P.O. Box 44599, NAIROBI
Mr R. McDermott, Standard Bank, P.O. Box 30003, NAIROBI
Miss E.B. Peacock, P.O. Box 46582, NAIROBI
Mr and Mrs G. Rajotte, The Aga Khan Academy, P.O. Box 44424, NAIROBI
Mrs Mavis Rowland, P.O. Box 46644, NAIROBI
Mr S. Roy, P.O. Box 51054, NAIROBI
Maureen Spinks, P.O. Box 30158, NAIROBI
Heng L. Thung, P.O. Box 62474, NAIROBI
Marie-Louise Vanherk, c/o Embassy of Belgium, P.O. Box 30461, NAIROBI
Mr and Mrs William C. Wilson, P.O. Box 65, KHUMUSALABA, Via Yala, Kenya

Local Junior Members

G.O. Abayo, P.O. Box 30344, NAIROBI
Brendon Bohannan, University of California Study Center, University of Nairobi, P.O. Box 30197, NAIROBI
Ken Burton, University of California Study Center, University of Nairobi, P.O. Box 30197, NAIROBI
C.E. Haji, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI
C. Karuga, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI
D.M.A. Kuchio, Dept. of Zoology, University of Nairobi, P.O. Box 30197, NAIROBI
Melvin J. Machayo, Elgon House, Nairobi School, P.O. Box 30047, NAIROBI
R.N. Mathenge, Elgon House, Nairobi School, P.O. Box 30047, NAIROBI
Boniface N. Mburu, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
L. Muruthi, Elgon House, Nairobi School, P.O. Box 30047, NAIROBI
Lawrence K. Mutharia, Elgon House, Nairobi School, P.O. Box 30047, NAIROBI
J. Ndungu, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI
Kayode Powell, c/o ICIPE, P.O. Box 30772, NAIROBI
S.M. Thuita, Nairobi School, P.O. Box 30047, NAIROBI
H.M. Tsingalia, c/o F. Schuitema, P.O. Box 30554, NAIROBI
M.N. Waweru, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI

Overseas Full Members

Malte Andersson, Dept. of Zoology, University of Goteborg, P.O. Box 25059, S - 400 31 GOTEBORG, Sweden
Lew Eatherton, 1728 North Blvd., Houston, Texas 77098, U.S.A.
Bo Hoff Johansen, Orions Alle 17, DK 2770 KASTRUP, Denmark
David Nicholson, 23 Vicarage Rd., Brewood, STAFFORD, ST19 9HA, U.K.
Dr Mary Roach, 41 Victory Court, Metuchen, New Jersey 08840, U.S.A.

Change of Status to Life Membership

Mr John Miskell, Elu-Unhur, P.O. Box 2925, MOGADISHU, Somalia
Dr Carol Price, 168 Stillorgan Road, Donnybrook, Dublin, Ireland

SOCIETY FUNCTIONS

Monday 8th February 1982 in the Museum Hall, Nairobi at 5.30 p.m. Mr Mike Gilbert of the Herbarium will give an illustrated lecture on 'ETHIOPIA'.

Sunday 14th February 1982 INFORMAL DAY OUTING. Please meet at the National Museum at 9 a.m. and bring a picnic lunch, plenty to drink, walking shoes and binoculars and note book.

26th/27th/28th February 1982 WEEKEND CAMP AT EL KARAMA, 42 km from Nanyuki on the uaso Nyiro River. This is an established tented camp and tents will be available for hire, but members have on this occasion also been invited to being their own tents in order to see this superb area and its wildlife. Members should bring all food, equipment and drinking water for their party. Accommodation in 10 tents for members who do not wish to bring their own will be allocated on a 'first come' basis. These tents are equipt with beds, matresses, chairs and tables. Food, drinking water and bedding will have to be brought. The charge for tents is Shs 35/- per person. There will be a small charge for members' tents of Shs 20/- to cover watchmen, kuni cutting etc. It is a good area for walking, game and bird watching. Members wishing to take part in this field trip should please fill in the enclosed form and return it to Mrs A.L. Campbell, P.O. Box 14469, Nairobi and enclose a stamped addressed envelope. Further details will be sent at the beginning of February.

Monday 8th March 1982 in the Museum Hall, Nairobi at 5.30 p.m. ANNUAL GENERAL MEETING followed by a film, the title of which will be announced later.

Sunday 14th March 1982 INFORMAL DAY OUTING. Please meet at the National Museum at 9 a.m.

9th - 12th April 1982 EASTER CAMP. Details later.

29th May - 1st June 1982 MADARAKA DAY WEEKEND AT COLCHECCIO, 35 miles north of Rumuruti. Details later.

STOP PRESS

MONDAY 8th MARCH 1982

AFTER THE A.G.M., TIM AND LISE CAMPBELL WILL GIVE A SHORT TALK WITH SLIDES OF THEIR TRIP TO RWANDA TO SEE THE GORILLAS.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton **(Editor EANHS Bulletin)**, Mr. S.G. Njuguna, Dr. D.J. Pearson.
Co-opted Members: Mrs. H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Dr. A. Hill, Dr. F. Owino.
Journal Editorial Sub-Committee : Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas.
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, P.L. Britton, Mrs. H.A. Britton, P.B. Taylor, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee : (Society representatives) Prof. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee : Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor **(EANHS Bulletin)**, Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SI
NH

EANHS

BULLETIN

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

CONTENTS

Field Identification of the Genus *Cisticola* (Aves) in Kenya: Part 3 28
Report on the Fourth Annual Nairobi Bird Census 37
Notes on Bird Behaviour 40
Notes on Levaillant's Barbet 41
Epitaph for Reichenow's Weaver 43
Snake Invasion in the Embakasi Area 44
Caracal in the Aberdares 44
Camp at El Karama Ranch 46
For Sale 48
Wanted 48
Society Notes 48
Extra-Ordinary General Meeting 50
New Members 51
Society Functions 52

FIELD IDENTIFICATION OF THE GENUS CISTICOLA (AVES)
IN KENYA: PART 3

Parts 1 and 2 of this series have already been published (EANHS Bulletin: 108-114, 1981; 2-9, 1982).

This third paper deals with the remaining 11 species that occur in Kenya, which can all be categorised as 'large and streaked': WINDING *C. galactotes*, CARRUTHERS' *C. carruthersi*, TINKLING *C. tinniens*, STOUT *C. robusta*, ABERDARE *C. aberdare*, CROAKING *C. natalensis*, RATTLING *C. chiniana*, BORAN *C. bodessa*, WAILING *C. lais*, ASHY *C. cinereola* and TANA RIVER *C. restricta*. Many of the group show radical sexual size differences of up to 20% so that wing lengths of males (averages; central Kenya races; Mackworth-Praed & Grant 1960) range 58-72 mm, while females are 53-61 mm. Thus the males are in the same size bracket as such common species as African Citril *Serinus citrinelloides*, Grey-headed Social Weaver *Pseudonigrita arnaudi*, Amethyst Sunbird *Nectarinia amethystina* and Red-billed Quelea *Quelea quelea*, while being larger than Waxbill *Estrilda astrild*, Variable Sunbird *Nectarinia venusta* and White-eyes *Zosterops* sp. Females are similar in size to Abyssinian White-eye *Z. abyssinica*, Green-winged Pytilia *Pytilia melba* and Purple Grenadier *Uraeginthus ianthinogaster*, *and* to the *very largest* of the 'small' *Cisticola* group (part 2 of this series).

All the group are *boldly* streaked on the mantle, and, a few, on the crown (see photos of WINDING and STOUT, Ph XIII, Mackworth-Praed & Grant 1960 - and compare with the more than usually prominent streaking of the 'unstreaked' HUNTER'S on Ph XII).

As first steps in the subdivision of this large group, TINKLING and WINDING show a *strongly* contrasting reddish to rufous panel in the closed wing, while the others do not (although some may have a dull brown panel). Secondly, a rufous to brown crown (streaked or not) that contrasts with the mantle is present in TINKLING, WINDING, CARRUTHERS', STOUT, ABERDARE, BORAN, WAILING and TANA RIVER.

Other generalisations that can be made on this group :-

1) all except CARRUTHERS' sing from perches.
2) all require habitats with bushes/tall grass/ trees/ papyrus/reeds, rather than the open grasslands of the similar Subgroup A of the 'small' group. Small females of the 'large streaked' group can be separated from the largest of the 'small' group by association with their much larger males, and by the bushed, treed etc, less open habitats.
3) certain races of WINDING and CROAKING can show substantially different non-breeding plumages.
4) young birds show a yellowish ventral torso in WAILING, STOUT, ABERDARE and CROAKING; face and/or chin to chest yellowish in RATTLING, WINDING, ASHY and (?) TANA RIVER; unrecorded in CARRUTHERS'; ventral yellow apparently varying bright to absent in TINKLING.
5) tail patterns at times useful in identification.

In addition to the previously cited references, I have field experience of 9 of these species.

a) WINDING CISTICOLA C. galactotes

This is a good species with which to start this group, as it is common and widespread in Kenya, and also well marked and conspicuous.

It is typically a bird of marshes and damp ground, frequenting sedges, lakeside reeds and vegetation tangles, but also extending to drier habitats nearby; altitude range sea level to 2300 m. Thus it is common around Nairobi; in the riverside habitat around Hippo Pools and around various other lakes and dams in Nairobi National Park; in the tall grass around the ponds at Dandora sewage works; in the scrub tangles in the river valley on the nature reserve at Kenyatta University College, etc etc.

It can be distinguished from all other Kenya Cisticolas **but** the TINKLING by the combination of bold streaking, and **prominent** rufous crown and large rufous contrasting patch in the closed wing. Plumage in detail :- crown dull to bright rufous brown, at times streaked faintly dark, contrasting with the dull greyer brown nape; mantle greyish, prominently streaked thick black; rump grey; large rufous-orange contrasting patch in the closed wing; dorsal tail brownish, with dark subterminal spots and pale tip; ventral torso creamy buff. Young birds broadly streaked dark on the crown; pale yellow on chin and breast (Mackworth-Praed & Grant).

Two points need to be made on plumage variations in Kenya. Firstly, the race at the coast apparently (Lynes) has the face whitish (as opposed to reddish in the inland race described above), and has less bold streaks on the mantle; Lynes (1930) also notes that its reddish crown can speedily abrade to a cold dull olive grey (the first two of these points are not born out by specimens, apparently from the Kenya coast, in the National Museum collection, Nairobi). Secondly, the inland race can at times assume a non-breeding plumage, with prominent dark crown streaking and a more tawny or reddish brown mantle.

Like the others, this species is silent and inconspicuous when not breeding but, during the breeding season, it utters a very distinctive "single rasping note" (Mackworth-Praed & Grant), low but far-carrying, that closely resembles the winding or reverse winding of a machanical wristwatch (which is unlucky for those of you with electronics...) It can also give loud calls rather reminiscent of RATTLING :- "chew chew chew chew-up" (but RATTLING lacks the strongly contrasting panel in the closed wing).

b) CARRUTHERS' CISTICOLA C. carruthersi

This species is very similar to WINDING, but easily distinguishable from it. The first point is geographical: CARRUTHERS' ranges altitudinally up to 2200 m, but is endemic to papyrus swamps. Thus it is restricted to the far west of Kenya, in the papyrus that fringes the Kavirondo Gulf of Lake Victoria, east from Yala Swamp to Kisumu, and then west again from Kisumu to Homa Bay; it is common in these habitats, and is the most easily seen of Kenya's papyrus-endemic birds. WINDING also occurs around these swampy habitats but, where CARRUTHERS' is present (in its swamp interior habitat), is confined to the swamp edges.

CARRUTHERS' resembles WINDING closely in plumage except that :- (a) the contrasting patch in the closed wing is dull brown and nothing like so prominent as the rufous blaze of

WINDING, and (b) the crown is chestnut brown unstreaked as opposed to bright rufous brown.

Other plumage features :- blackish colouration of dorsal tail surface extending well up the tail towards the rump (as opposed to the thin dark subterminal spot band of WINDING); ventral torso white, flanks greyish; mantle thickly streaked black so as to give an overall dark effect; Lynes mentions CARRUTHERS' finer and straighter bill. Features of young birds apparently unrecorded.

CARRUTHERS' is a noisey bird, and my notes detail the song as a "rapid loud explosive trill of 5-9 identical single notes, lasting overall 1 to 2 seconds, always uttered in the air as (the) bird flies from one papyrus stalk to another." - thus quite different from any nearby WINDINGs.

c) TINKLING CISTICOLA *C. tinniens*

This species also resembles WINDING and occurs in wet habitats, but it is a high altitude bird, ranging 200 - 3200 m (thus just overlapping with the top of WINDING's range). It inhabits perennial swamps, stream bank vegetation and wet tussock grass areas, and ranges from Eldoret, across the Uasin Gishu plateau and Nandi to Molo, the Aberdares and Mt Kenya. It is common in the reed fringe of the very variable Lake Ol Bolossat, and around the higher dams etc on the Kinangop plateau (eg lakes on the river Kalini, 5 miles south of North Kinangop (January)).

Plumage is bright and distinctive: crown prominent unstreaked orange-rufous (becoming more streaked towards and on the nape), contrasting strongly with the mantle, which is grey, streaked prominently (c 85%) black so as to appear all black at a distance; strongly contrasting red to orange-rufous patch in the closed wing varying from smallish to large in size; central tail feathers black edged prominently rufous to give overall reddish effect, with the feathers towards the side of the tail becoming entirely rufous except for a dark subterminal spot and pale tip; tail can thus appear entirely pale orangish brown; dark subterminal spots on both tail surfaces; ventral torso whitish. The tail, and indeed the whole bird, is long and slim, recalling a Prinia; the jerky, flitting flight, low over the grasstops, is also characteristic. Young birds streaked on the crown; more tawny above with less black streaking.

The call is a "far-carrying chirruped whistle quite high-pitched..." (Mackworth-Praed & Grant).

This species can thus be seperated from WINDING by :-
(a) altitude (except small overlap zone); (b) calls; (c) tail pattern + length. From CARRUTHERS' :- altitude, range, habitat all quite different.

d) STOUT CISTICOLA *C. robusta*

This and the following 2 species form a closely related group in which the males are large to very so (wings around 70 mm), while the females are small (wings around 60 mm, ie much more medium-sized). They can be seperated from WINDING and TINKLING by the absence of a strongly contrasting rufous patch in the closed wing, and from CARRUTHERS' by range and habitat.

STOUT (Mackworth-Praed & Grant Ph XIII) can readily be identified by its unique, prominent and large unstreaked bright orange-rufous nape. The crown itself is also orange-rufous, with a few thinnish dark streaks on the front and top, so that this and the blazing nape produce a blaze of colour around the head-neck area that is visible even at long range, and which contrasts markedly with the mantle, which is greyish with thick black streaking.

Other good pointers are the large and plump build of the male; the stout and heavy bill; and the fact that the dark bill and largish eye are both quite prominent on the pale to whitish face. The rest of the plumage :- ventral torso the usual buff-tinged cream, possibly a little dusky along the flanks/sides of the breast; dorsal tail greyish with subterminal dark spots and a pale tip, but often appearing quite dark to blackish, and thus producing some confusion with ABERDARE (described below). Young birds quite bright yellow over the whole ventral torso, and with the crown and nape streaked blackish; older immatures might lack the yellow but still have a streaked nape.

The call, which is given from a prominent perch on grass stems or low shrubs, is a rich, full whistle, described by Mackworth-Praed & Grant as "a piping and rippling or tremulo whistle; sometimes it is not rippling and is not unlike the piped whistle of a Wader.". This is a rather strange sound to emanate from a Cisticola and, when the bird is seen giving it, is very distinctive. Other calls include a "mouselike squeak or possibly pipe", and, often given from these wary birds, a sharp "weet weet" alarm call.

This is a widespread and fairly prominent bird of the Kenya highlands, Britton (1980) quoting Mt Elgon, the Cheranganis, Elgeyu, Baringo, Laikipia and Meru to the Nguruman Hills, Nairobi, Ngong, Machakos, Kitui and Simba; altitude range 1200 - 2500 m, though usually above 1600 m in Kenya. It likes moist areas with long grass, bushes and/or trees, but can be found on very dry long grassland out of the breeding season.

Thus very common all over the Narogomon-Hyaena Dam areas and the eastern grasslands of Nairobi National Park in April '81, while in nervous parties of 6 or so on the eastern grasslands when they were dry in September. Other localities include Kenyatta University College nature reserve (June to December, at least), Lessos Dam near Eldoret (January), and the southern end (& most probably other parts too) of Lake Nakuru National Park (October).

e) ABERDARE CISTICOLA C. aberdare

This species was originally treated as a race of STOUT (see Mackworth-Praed & Grant p 490), but was seperated by Tralor (1967b). I have no field experience of this bird, and thus will quote freely from the usual sources, plus Turner's (1977) useful summary.

This species can be separated from the closely allied STOUT by the following features. The tail is slightly longer but, apart from a buff tip, is entirely black, with no ornamentation. Secondly, the dark crown streaking is thicker than STOUT's and extends heavily down over the nape; thus the unmarked orange-rufous nape so characteristic of STOUT is absent. This nape streaking seperates ABERDARE from dark-tailed adult STOUTs.

Furthermore, ABERDARE is a high altitude bird. Although they can occur on the same ground. STOUT is rare above 2400 m, while ABERDARE ranges 2300 - 3700 m. It is endemic to highland grassland on both sides of the rift around the Aberdares, Molo and Mau Narok areas, being "the commonest Cisticola....around 2400 m" at the latter two sites (Turner 1977).

f) CROAKING CISTICOLA *C. natalensis*

While I am constrained to admit to a certain looseness of grasp on the features of this species, although I have seen it in the field, it is also worth noting that it varies racially within Kenya, and *can* show a different non-breeding plumage - thus any comments more than usually, in fact desperately acceptable.

CROAKING is similarly large sexually dimorphic as STOUT and ABERDARE, and my field notes mention a "thick, bull-necked appearance". The bill is again prominent, large and heavy, and decurved sufficiently for this feature to be noticeable even at long range.

The race *kapitensis* (Matthews Range-Nyambenis-Thika-Nairobi-Machakos-Kitui-Simba (Britton 1980)) has the crown and mantle palish brown, fairly thickly streaked dark. The crown can be *slightly* redder than the mantle, and there can be a *slight* rufousish tinge to the nape, but this colouration is nothing like so pronounced as the orange-rufous blaze of STOUT, while the nape of CROAKING is always streaked. The race *matengorum* (Chyulu and Shimba Hills, Mombasa and coastal Kenya) has rather more subtle streaking on the upperparts, and some individuals can adopt a semi-non-breeding plumage with longer tail, buffer ventral torso and the mantle more tawny.

Other plumage features :- possibly a hint of a warm brown contrasting patch in the closed wing; ventral torso creamy white with some buffish tinge; prominent subterminal dark spots on both surfaces of the white-tipped tail. Young birds somewhat darker above, with ventral torso yellow.

This is a bird of tall grass, associated with bushes and/or trees (altitude range sea level - 2200 m). Males continually call from prominent perches such as the topmost twigs of trees or bushes. Mackworth-Praed & Grant record the call as an "unmusical vibrating single syllable", while the often uttered alarm is "a frog-like croak of two syllables."; a short display flight on flapping, butterfly-like wings is also noted. I noted the call in Tsavo W as a quite bell-like series of "plonking whistles", and Lynes mentions that *kapitensis* in the same area can sound like the Grey Hornbill *Tockus nasutus*, Grey Woodpecker *Mesopicos goertae* and even Francolins *Francolinus* sp, ie very different from STOUT.

Hence CROAKING can be seperated from : STOUT by the lack of the unstreaked rufous nape blaze, and by calls; from ABERDARE by the ornamented dorsal tail surface, and by altitude; from CARRUTHERS' by habitat and calls; and from TINKLING and WINDING by lack of a rufous blaze in the closed wing, and by calls.

g) RATTLING CISTICOLA *C. chiniana*

This is the typical Cisticola of the dry thornbush of Kenya, though it also penetrates lusher habitats. Its large size and prominent, noisey character make it second in general familiarity only to SINGING.

It again shows sexual dimorphism in size, the males of inland Kenya being large (wing around 65 mm), with the females about 15 % smaller The very different race *heterophrys* of coastal Kenya is significantly smaller, with female wings the lengths of the very largest PECTORAL-PATCH (Mackworth-Praed & Grant).

Plumage of inland Kenya races :- crown warm brown or chestnut to dull rufous brown, finely (often difficult to see in the field) to mediumly streaked brown; crown contrasts with the mantle, which is more or less the same base colour, but which is fairly thickly and prominently streaked blackish, though not so streaked as to appear black at a distance. Small dull brown contrasting patch in the closed wing, but this patch often appearing uniform with the rest of the wing in the field. Ventral torso usual creamish, varyingly tinged buffish. Tail brownish with a pale tip, and subterminal dark spots on both surfaces. Young birds less streaked above, and yellowish from chin to breast.

The coastal race heterophrys is a different proposition. Mackworth-Praed & Grant (p 469) give its chestnut edging to the flight feathers (ie a contrasting patch in the closed wing) as a means of distinction from TRILLING and ROCK-LOVING (both in Part 1 of this series), which goes to emphasise (a) that the mantle of heterophrys is streaked subtlely enough to at times appear plain, and (b) that heterophrys' more contrasting chestnut wing patch must be a significant fieldmark. These points are born out by the Museum's skins :- the wing patch is contrasting; the mantle appears also unmarked, or faintly streaked like HUNTER'S (see Part 1 of this series); the crown is distinctly redder, and contrasts more strongly with the plainer, browner mantle.

RATTLING is a common and widespread bird of the dry thornbush and scrub and also greener, more grassy woodland and grassland in Kenya; altitude range sea level to 2000 m (Britton 1980). Thus localities include the bush of Lake Nakuru National Park; the area around Cheetah Gate, and sometimes Hippo Pools, in Nairobi National Park; the bush south of Lukenya cliffs, near the main Mombasa road just to the south of Athi River (NB this is a good birdwatching spot generally); the rift floor immediately west of Ngong Hills (another generally interesting area, where the dry bush comes close to Nairobi); and the dry bush of areas like Baringo, Tsavo E and W, Magadi, etc etc.

This is a noisy and prominent bird. My notes record "climbing actively around in low scrub", "often perched on the tops of bushes; loud and noisy all the time", "very noisy.... from tops of small trees/bushes" etc. The loud, far-carrying and distinctive call that originates the name is given from a prominent perch high in a tree or on a bush, and is one of the characteristic noises of the dry bush country: Mackworth-Praed & Grant render it as "chaa-chaa-churr-chee-chee", while I've noted "noisy scolding 'che che che-cheee twirsh'", or "the usual 2 or 3 introductory notes, followed by a harsh rattle", or then again "1 2 3 churrrr".

There are also persistant loud, harsh and dry "chee-chee" or "chaaa-chaaa" alarm calls, and Mackworth-Praed & Grant note the male furiously driving the female away from the nest in alarm situations, or perching near her, furiously bowing, flicking his tail and uttering the alarm. The male call can be given, with less gusto, in the non-breeding season, and these large birds are never as unobtrusive as many of the other species.

The inland races of RATTLING can be distinguished from the above mentioned species of this group by :- WINDING's prominent contrasting wing patch and calls (though WINDING can do a rather similar '1 2 3-churrr', though not so raucous, and interspersed with the characteristic 'watch-winding' noise); CARRUTHERS' unstreaked crown and papyrus habitat, and contrasting wing patch: TINKLING's altitude, strongly contrasting wing patch and crown, tail pattern, call; STOUT's calls and rufous nape blaze; ABERDARE's altitude and tail pattern; CROAKING's calls, heavier decurved bill, thicker heavier appearance, and possibly more heavily streaked crown.

heterophrys has a contrasting patch in the closed wing like TINKLING, CARRUTHERS' and WINDING, but can easily be seperated from the first two by range and altitude, and from WINDING by calls and intensity of mantle streaking.

h) BORAN CISTICOLA *C. bodessa*

Listed by Mackworth-Praed & Grant (p 469) as a race of RATTLING, BORAN has subsequently been raised to species status by Erard (1974). Dowsett-Lemaire & Dowsett (1978) give a useful summary of the BORAN in Kenya, from which I freely extract material here.

BORAN resembles RATTLING, except for the following features. Firstly, its crown is unmarked brown, or possibly with the very faintest of darker markings, as opposed to the distinctly more heavily straaked crown of RATTLING; RATTLING from the Kenya coast lack crown streaks, but are well seperated geographically from BORAN. Secondly, the mantle of BORAN is diffusely streaked slightly darker grey on greyish brown, as opposed to the darker, bolder, thicker mantle streaking of RATTLING. Thirdly, BORAN's song differs radically from the '1 2 3 rattle' of RATTLING by being a loud "fast succession of similarly shaped notes in a descending pitch" (Dowsett-Lamaire & Dowsett 1978; see their comparison of sonograms).

Due to its similarities to RATTLING and its only recently achieved species status, the number of records of BORAN is small, with Britton (1980) summarising it as "very local in N Kenya up to 2100 m, frequenting rocky, sparsely grassed hillsides with low scrub......Nanyuki, the Timau/Isiolo ecsarpment, the Kapenguris/Kongelai escarpment, Mt Marsabit and Moyale.". The most visited of these localities (ie the easy option) is the Timau/Isiolo scarp (darling, everybody's been there !), which is on the A2 north of Nanyuki, a few hundred metres north of the B6 turnoff to Meru town, on the slope descending towards Isiolo. Dowsett-Lemaire & Dowsett (1978) found both RATTLING and BORAN in song there in December (the birds can often be seen without actually leaving the tarmac), while I miserably plagiarised their experience in May.

This species very probably occurs in more areas of northern Kenya, and its possibility should be born in mind whenever RATTLING-types are encountered. Its distinctions from RATTLING are given above; its differences from the other species in this group, in addition to its northerly range, parallel those of RATTLING.

i) WAILING CISTICOLA *C. lais*

This species resembles RATTLING in appearance. Size largish, with no marked sexual dimorphism. Crown quite rich chestnut-brown to reddish, thinly to mediumly streaked dark and contrasting with the greyer, more thickly dark-streaked mantle. The crown colouration extends down onto the face and ear coverts.

Tail long and brownish, with subterminal dark spots on the inner webs of the feathers only. Faint tinge of contrasting reddish in the closed wing. Ventral torso dusky, especially on the flanks. Young birds yellow on ventral torso.

This is a fairly localised bird of the central highlands of Kenya, with Britton (1980) listing the Nguruman Hills, the Kedong Valley, Lukenya, Laikipia and Mt Uraguess; altitude range 1500 - 2750 m. It likes bush and grass-clad rocky hills, screes and cliffs, and is usually to be found on the bushed screes of a least the northern end of the Hell's Gate or Njorowa Gorge, southwest of Lake Naivasha. The habitat differences between this species and RATTLING are well seen in the small gorge to the west of the road, above Roger Mennell's Korongo Farm, also at Lake Naivasha (February '82). The WAILING were clambering about quite low down in the scrub near the cliffs, and often ferreting rather inconspicuously around on the bare rock of the cliffs and boulders. This latter habitat gave rise to cardiac flutters for ROCK-LOVING (Part 1 of this series), but this was at once dismissed by WAILING's prominent mantle streaking. The RATTLING, on the other hand, were only 100 m or so away from the WAILING, but high in the bushes and trees of the flat-bottomed valley below the gorge that widens downhill towards the farm and the lake.

At both Naivasha localities, I noted the call as a loud "peeet....peeet" whistle that noisily echoed around the cliffs. Mackworth-Praed & Grant describe a "shrill 'sweeping' whistle 'piet-piet-piet' which seems to echo and carry far round the hillsides in wailing fashion; the alarm, a high-pitched scolding bleat...". They also note the apparent lack of any distinctive breeding season behaviour, and the bird becomes as unobtrusive as the rest when not breeding. They perch readily on bushes, grass or rocks, moving fairly frequently rather than keeping to one perch for protracted periods.

WAILING thus closely resembles RATTLING, but can be distinguished from it by call, by its distinctive rocky habitat, and by the subterminal dark spots only on the inner webs of the tail feathers (difficult to see in the field). Bold mantle streaking eliminates the similarly 'rocky' ROCK-LOVING.

j) ASHY CISTICOLA C. cinereola

This species is medium sized, ie not as large as the bulky males of STOUT, ABERDARE, CROAKING or RATTLING, and it derives its name from its palish grey appearance. Thus the mantle is pale to dark greyish brown, mediumly to thickly streaked dark brown; although the crown may be a little browner, it is usually uniform with the mantle. There is no contrasting rufous patch in the closed wing, and the ventral torso is usually buffish-tinged white. Tail dark brown to greyish brown, with a pale tip and dark subterminal spots on both surfaces. Young birds are buffer above, and washed faint yellow from the face to the breast.

In addition to its greyness, the distinctive feature of ASHY is its unexpectedly (for a Cisticola) pleasant, sweet, tinkling warbler or lark-like song, which is given from prominent perches on the tops of bushes and low trees. Mackworth-Praed & Grant describe this call as a "sweet warbling plaintive song 'twi-twi-twi-twee-oo'", and to be surprised that such a sweet song can emanate from one of this wretched genus seems to me to be a valuable fieldmark. Mackworth-Praed & Grant also mention an alarm call "chi-weet-oo".

This is a common bird of the drier areas of Kenya, ranging Marsabit-Nyiru-northern Uaso Nyiro-Isiolo-Meru-Garissa-Magadi-the Tsavos-Taru; altitude range 300-1300 m (Britton 1980). Birds are common and in song on the bushtops of the Ngulia area of Tsavo West in May and November (combine it with ZITTING and your ringing); also common on the bushed slopes around Marsabit (June).

ASHY can be distinguished from the other members of this group as follows :- from WINDING, CARRUTHERS' and TINKLING by lack of a contrasting panel in the closed wing, and from the latter two by range and/or habitat and/or altitude; from STOUT by lack of nape blaze, and calls; from ABERDARE by altitude and tail ornament; from CROAKING by calls, slimmer build, less substantial bill, greyer appearance; from RATTLING by very different calls and much greyer appearance; BORAN appears a problem with its dry habitats, and similar range in northern parts of Kenya as some ASHY, but BORAN's browner unmarked crown contrasts with its mantle, and the calls of the two species are very different; from WAILING by the lack of a browner crown markedly contrasting with the mantle, the lack of any contrasting patch in the closed wing, different calls, subterminal dark spots on both webs of the tail feathers, non-rocky habitat, and possibly by less dusky (especially on the flanks) ventral torso.

k) TANA RIVER CISTICOLA C. restricta

This, mercifully the final species under consideration in these articles, is another bird of which I have no field experience. But this is of less than usual consequence as TANA RIVER is a bird of very restricted range and, indeed, of occasionally debated existence.

It was raised from a subspecies of ASHY to full species status by Traylor (1967a), but several other field ornithologists have since failed to relocate it, and it has been mooted that the species type material might reflect aberrant forms of ASHY.

Britton (1980) notes it as "endemic to semi-arid bushland in the lower Tana River basin, E Kenya. The few records are from Karawa, Garsen, Mnazini, Sangole and Ijara.", but recent reports of a similar species from similar riverine habitats in southern Somalia (J.S. Ash per D.J. Pearson) may suggest that TANA RIVER is not endemic to Kenya, but that its Kenyan members are on the edge of their Somalia-centralised range, such that small population fluctuations can cause its absence in Kenya for years at a time (thus perhaps explaining its non-relocation).

However, whatever its nature, the main point is that it is restricted to the lower Tana. Turner (1977) gives a useful summary, noting that it differs from ASHY as follows:- browner, no white bases to the nape feathers, more rusty brown crown that contrasts with the mantle; grey wash on the flanks and sides of the breast; longer tail.

Distinctions from other species likely to be found at these low altitudes are :- contrasting wing panel and reddish crown of coastal WINDING: build, (?) range, calls, and uniform crown and mantle of coastal CROAKING; unstreaked crown and contrasting wing patch of coastal RATTLING.

ADDITIONAL REFERENCES

Dowsett-Lemaire, F.& Dowsett, R.J. 1978 The Boran Cisticola in Kenya, and its possible affinities. Scopus 2: 29-33.

Erard, C. 1974 The problem of the Boran Cisticola. Bulletin of the British Ornithologists' Club 94: 26-38

Traylor, M.A. 1967a A new species of Cisticola. Bulletin of the British Ornithologists' Club 87: 45-48

" " 1967b *Cisticola aberdare* a good species. ibedem 87: 137-141

ADDITIONAL ACKNOWLEDGEMENTS

Professor D.E. Pomeroy has been a source of many useful comments 'when the beasts were in view' at several localities, while G.R. Cunningham van Someren has unfailingly provided specimens, texts and working space at the National Museum, Nairobi.

REQUEST FOR INFORMATION

As stated in the first of these articles, I am by no means an expert on this subject, so that I may well have made errors and/or omissions. Additional information, particularly on field-marks, is most welcome and all correspondence will be answered and acknowledged.

Adrian D. Lewis, Geology Dept., P.O. Box 30197, NAIROBI

REPORT ON THE FOURTH ANNUAL NAIROBI BIRD CENSUS

The fourth census of birds within the Nairobi Provincial boundary took place on Sunday 29th November 1981 in hot and dry conditions. Sixty six members and friends took part in this exercise and in a total of 163 hours of observation recorded 259 species and some 8641 individuals.

Of interest was the number of species which only had one record - 87 of them (listed below) - which demonstrates the importance of having as many observers as possible.

Many members appear to have had trouble with some of the new English names used in Birds of East Africa, the Society's publication which the census check list followed. Nearly all observers who saw a 'Common Indigo Bird' found Red-billed Fire Finch Indigo Bird on the list and deleted the first four words. ! In the species list (below) the older, better known, names are written in parentheses after the new name.

We would like to thank all those who gave their time to the census and we hope for their co-operation again later this year when we will again conduct this interesting exercise.

PARTICIPANTS IN THE 1981 NAIROBI BIRD CENSUS

Brian Meadows, Mrs Sue Silvester, Richard Mathews, Terry Mathews, Mrs B.B. Maloba, Mr Bessell, J. Eliot, Inga Ayres, D.F. Kent, Peps Heasman, Richard Greaves, Jenny Shepherd, Judy Shepherd, Paul B. Rossiter, Eric Risley, Mary Oates, Mike and Caroline Gilbert, David Trump, Dennie Angwin, Dr and Mrs K.M. Price, Dr and Mrs Loefler, Mrs E.C. Trump, Mrs A.C.H. de Bruin, Bettina and Amolo Ng'weno, Lise and Marian Westley, Teri Stephenson, Dr and Mrs J.J. Doyle, Fleur Ng'weno, Dindy Drury, Derek Pomeroy, Miss Mary McNaughton, the Visagie family, R.O. and S.C. Williams, Jane Carson, Marjorie Watts, Pat and Roger Wootton, Arthur Humphries, Brian Williams, Peter Osborn, Mr and Mrs Graham Wickenden, I.G., E.C. and G.R. Cunningham van Someren, Mrs F.M. Edwards, Lady Cole, E.B. Angwin, K. Lock, Mrs D. Duncan, Joan and John Karmali, R. Lloyd, Beatrice Tengecho, Lionel and Jean Hartley, Adrian D. Lewis, Clive Briffett.

AREAS COVERED

Kariobangi Sewage Works, Dandora Industrial Area Ponds, Loresho Ridge, University Field Station Dam, Miotoni Lane, Karen, Spring Valley, Ngong Road, Windy Ridge Karen, Ring Road Parklands, K.I.A., Church Road Westlands, Riverside Drive, Kikenni Estate Langatam Closeburn Nursery, Ndege Road Karen, Karen Road, Chalbi Drive Lavington, Wellcome Centre Loresho South, National Museum grounds, Hillcrest School Reservoir, Mwitu Estate Karen, Loresho South Estate, Loresho Ridge, Redhill/Limuru Road, Karura Forest, Kiambere Road, Kenyatta University College Campus, Dagoretti Road and Rhino Park Karen, Riara Road/Dagoretti Corner, Kabete, City Park, Arboretum, Milima Road Langata, Langata Co-Operative College, Lower Kabete Road, Peter Greensmiths Nursery, Golf Range, Spring Valley, Bendara Lane, Rowallan Scout Camp, Ngong Road Forest, Forest Edge Road, Ololua Ridge, Dandora Estate Sewage Oxidation Ponds, Ruaraka, Embakasi Ranching Co., Athi Basin Circuit and Hippo Pools, Nairobi National Park.

SPECIES WITH ONLY ONE RECORD

Ostrich, Little Grebe, Pink-backed Pelican, Greater Cormorant, Little Egret, Open-billed Stork, Black Stork, Yellow-billed Stork, African Spoonbill, White-faced Whistling Duck, Shoveler, Teal, Hottentot Teal, Garganey, Southern Pochard, Spur-wing Goose, Secretary Bird, Egyptian Vulture, Lappet-faced Vulture, Harrier Hawk, Ayres' Hawk Eagle, Gabar Goshawk, Martial Eagle, Fish Eagle, Kestrel, Helmeted Guinea Fowl, Red-knobbed Coot, Little Ringed Plover, Kittlitz's Sand Plover, Black-winged Plover, African Snipe, Black-winged Stilt, Temminck's Courser, Gull-billed Tern, Speckled Pigeon, Feral Pigeon, Emerald-spotted Wood Dove, Nyanza Swift, Narina's Trogon, Malachite Kingfisher, Scimitarbill, Abyssinian Scimitarbill, Red-fronted Barbet, Moustached Green Tinkerbird, d'Arnaud's Barbet, Black-throated Honeyguide, Red-throated Wryneck, Brown-backed Woodpecker, Red-capped Lark, Fischer's Sparrow Lark, Short-tailed Lark, Angola Swallow, Grey-rumped Swallow, African Sand Martin, Drongo, Cape Rook, Yellow-bellied Greenbul, Anteater Chat, Lesser Swamp Warbler, Pectoral-patch Cisticola, Yellow-bellied Eremomela, Olivaceous Warbler, Moustached Warbler, Whitethroat, Southern Black Flycatcher, White Wagtail, Mountain Wagtail, Slate-coloured Boubou, Red-backed Shrike, Red-tailed Shrike, Violet-backed Starling, Wattled Starling, Red-winged Starling, Yellow-billed Oxpecker, Red-billed Oxpecker, Malachite Sunbird, Mariqua Sunbird, Northern Double-collared Sunbird, Golden-winged Sunbird, Red-billed Quelea, Grey-headed Social Weaver, Yellow-spotted Petronia, Zebra Waxbill, Black-cheeked Waxbill, Quailfinch, Yellow-crowned Canary, White-bellied Canary.

SPECIES LIST AND NUMBERS

Nomenclature and order follow Britton, P.L. (ed.) 1980. Birds of East Africa. Nairobi: EANHS. Where an older, more well known, common name is known, this follows the new name in parentheses.

Ostrich 9; Little Grebe 10; Pink-backed Pelican 6; Greater Cormorant 8; Grey Heron 8; Black-headed Heron 15; Cattle Egret 236; Green-backed Heron 2; Little Egret 2; Hamerkop 9; Open-billed Stork 2; Black Stork 2; Marabou 78; Yellow-billed Stork 20; Hadada 82; Sacred Ibis 184; African Spoonbill 4; White-faced (Tree) Whistling Duck 6; Egyptian Goose 22; Pintail 14; Shoveler 7; Teal 5; Red-billed Teal 30; Hottentot Teal 4; Garganey 85; Yellow-billed Duck 3; Southern Pochard 18; Spur-winged Goose 1; Secretary Bird 2; African White-backed Vulture 7; Egyptian Vulture 3; Lappet-faced Vulture 3; Harrier Hawk 1; Bateleur 3; Great Sparrowhawk 3; African Goshawk 5; Steppe Eagle 3; Tawny Eagle 7; Augur Buzzard 21; Common (Steppe) Buzzard 4; Ayres' Hawk Eagle 1; Long-crested Eagle 8; Gabar Goshawk 1; Martial Eagle 1; Crowned Eagle 2; Fish Eagle 1; Black Kite 186; Black-shouldered Kite 8; Kestrel 2; Yellow-necked Spurfowl 10; Helmeted Guinea Fowl 13; Crowned Crane 33; Common Moorhen 2; Black Crake 4; Red-knobbed Coot 100; Little Ringed Plover 6; Ringed Plover 4; Kittlitz's Sand Plover 5; Blacksmith Plover 7; Crowned Plover 23; Black-winged Plover 2; Common Sandpiper 63; Wood Sandpiper 23; Greenshank 9; Green Sandpiper 6; African Snipe 2; Little Stint 147; Ruff 9; Black-winged Stilt 8; Temminck's Courser 2; Gull-billed Tern 1; Lemon Dove 4; Speckled Pigeon 2; Feral Pigeon 2; Ring-necked Dove 31; Dusky Turtle (Pink-breasted) Dove 8; Red-eyed Dove 198; Laughing Dove 69; Emerald-spotted Wood Dove 1; Green Pigeon 29; Hartlaub's Turaco 28; Didric Cuckoo 15; Emerald Cuckoo 4; Klaas' Cuckoo 10; Red-chested Cuckoo 13; White-browed Coucal 9; African Wood Owl 3; Montane (Abyssinian) Nightjar 6; Little Swift 219; White-rumped Swift 22; Nyanza Swift 1; Palm Swift 11; Speckled Mousebird 529; Blue-naped Mousebird 8; Narina's Trogon 1; Malachite Kingfisher 2; Striped Kingfisher 4; Chestnut-bellied (Grey-headed) Kingfisher 4; Eurasian Bee-eater 44; Cinnamon-chested Bee-eater 75; Little Bee-eater 7; Hoopoe 13; Scimitarbill 2; Abyssinian Scimitarbill 3; Silvery-cheeked Hornbill 7; Red-fronted Barbet 2; Spotted-flanked Barbet 3; White-headed Barbet 13; Yellow (Golden)-rumped Tinkerbird 26; Moustached Green Tinkerbird 1; d'Arnaud's Barbet 2; Black-throated (Greater) Honeyguide 1; Eastern (Cassin's) Honeybird 4; Red-throated Wryneck 1; Nubian Woodpecker 9; Cardinal Woodpecker 4; Grey Woodpecker 6; Brown-backed Woodpecker 2; Red-capped Lark 1; Fischer's Sparrow Lark 7; Short-tailed Lark 1; Rufous-naped Lark 18; Striped Swallow 41; Angola Swallow 1; Red-rumped Swallow 10; African Rock Martin 23; Grey-rumped Swallow 4; Eurasian Swallow 259; Wire-tailed Swallow 7; Black Rough-wing 111; African Sand Martin 20; Drongo 2; Black-headed Oriole 32; Pied Crow 167; Cape Rook 2; White-bellied (breasted) Tit 55; Northern Pied Babbler 41; Black Cuckoo Shrike 2; Grey Cuckoo Shrike 6; Slender-billed Greenbul 11; Yellow-whiskered Greenbul 34; Yellow-bellied Greenbul 1; Olive Mountain (Fischer's) Greenbul 15; Common Bulbul 259; White-browed Robin Chat 2; Robin Chat 36; Ruppell's Robin Chat 44; Rock Thrush 3; Anteater Chat 6; Isabelline Wheatear 5; Northern Wheatear 8; Pied Wheatear 7; White-starred (Bush) Forest Robin 4; Stonechat 4; Northern Olive Thrush 113; Lesser Swamp Warbler 5; Grey Apalis 3; Yellow((Black)- breasted Apalis 54; Black-collared Apalis 3; Grey-backed Camaroptera 26; Yellow Warbler 9; Pectoral-patch Cisticola 16; Singing Cisticola 67; Rattling Cisticola 39; Winding Cisticola 40; Stout Cisticola 9; Grey-capped Warbler 4; Yellow-bellied Eremomela 1; Olivaceous Warbler 1; Willow Warbler 63; Tawny-flanked Prinia 35; Moustached Warbler 3; Blackcap 35; Garden Warbler 3; Whitethroat 1; Red-faced Crombec 7; Pale

Flycatcher 10; White-eyed Slaty Flycatcher 89; Southern Black Flycatcher 2; Dusky Flycatcher 23; Spotted Flycatcher 6; Chin-spot Batis (Flycatcher) 32; Paradise Flycatcher 54; Red-throated Pipit 23; Richard's Pipit 10; Tree Pipit 15; Yellow-throated Longclaw 22; African Pied Wagtail 25; White Wagtail 15; Mountain Wagtail 3; Yellow Wagtail 362; Black-backed Puffback 36; Tropical Boubou 40; Slate-coloured Boubou 3; Sulphur-breasted Bush Shrike 7; Brubru 2; Brown-headed Tchagra (Bush Shrike) 3; Long-tailed Fiscal 7; Fiscal 102; Red-backed Shrike 1; Red-tailed Shrike 1; Violet-backed Starling 2; Wattled Starling 70; Blue-eared Glossy Starling 47; Red-winged Starling 4; Hildebrant's Starling 32; Superb Starling 74; Yellow-billed Oxpecker 4; Red-billed Oxpecker 4; Collared Sunbird 49; Amethyst Sunbird 62; Malachite Sunbird 1; Bronze Sunbird 146; Mariqua Sunbird 5; Eastern Double-collared Sunbird 10; Northern Double-collared Sunbird 2; Golden-winged Sunbird 1; Scarlet-chested Sunbird 16; Variable Sunbird 185; Green-headed Sunbird 6; Abyssinian (Yellow) White-eye 103; Montane (Kikuyu) White-eye 96; Grosbeak Weaver 32; White-winged Widowbird 23; Red-naped Widowbird 199; Jackson's Widowbird 87; Baglafecht (Reichenow's) Weaver 219; Black-headed Weaver 21; Brown-capped Weaver 7; Spectacled Weaver 10; Speke's Weaver 141; Holub's Golden Weaver 64; Red-billed Quelea 2; White-browed Sparrow Weaver 19; Grey-headed Social Weaver 2; Grey-headed (Parrot-billed) Sparrow 65; Rufous Sparrow 81; Yellow-spotted Petronia 1; Red-billed Firefinch Indigo-bird (Common or Purple Indigobird) 18; Pin-tailed Whydah 41; Zebra Waxbill 12; Waxbill 120; Black-cheeked Waxbill 2; Yellow-bellied Waxbill 8; Crimson-rumped Waxbill 15; African Firefinch 24; Red-billed Firefinch 105; Quailfinch 6; Red-cheeked Cordon-bleu 34; Purple Grenadier 5; Black and White (Rufous-backed) Mannikin 3; Bronze Mannikin 305; Golden-breasted Bunting 15; Yellow-rumped Seed-eater 34; Yellow-crowned Canary 3; African Citril 42; White-bellied Canary 1; Streaky Seed-eater 185; Brimstone Canary 11.

Finally, we would like to thank Mr and Mrs Maloba for so kindly hosting the party to draw up a preliminary list on the evening of the census. Also thanks go to Mr Don Turner for advising on unusual and difficult-to-identify species seen during the census.

Dennie Angwin

NOTES ON BIRD BEHAVIOUR

The dancing ring

Ten Anteater Chats Myrmecocichla aethiops, were assembled in a circle about one and a half metres in diametre watching the eleventh dancing. The soloist, centred, leapt vertically into the air and hovered for about ten seconds, landed centre, then took his place back on the circumference as part of the audience. As soon as the arena was unoccupied another bird centred itself and carried on with the same ritual. The precision of movement was remarkable; each bird had a turn, no two birds ever clashed or got into the centre at the same time; it was like watching a well-rehearsed eightsome reel.

This ring, on this Crescent Island, Naivsaha track attracted attention from more than its human observers; two Rufous Sparrows Passer motitensis flew in, joined the circle and awaited a turn. Then a Superb Starling Spreo superbus, joined the fun and this was followed shortly by two more. We then had sixteen birds involved in the measure.

Priscilla Allen and I were enchanted but mystified by the scene on this 27th of May morning in 1977. The rains were nearly over; the pastures a brilliant green. Had it been a courtship display? It seemed unlikely with three species involved. Or was it sheer *joir de vivre* ?

Peacemaking in aggression

On the lawn in Riverside Drive, Nairobi, two female Baglafecht Weavers *Ploceus baglafecht*, were engaged in close combat. It looked a thoroughly nasty fight and may have been over the favours of the one male I had seen with them earlier. When feathers started to fly it all got too much for the nerves of this observer who was about to 'interfere with the course of nature' when along the nearby path strutted a Laughing Dove *Streptopelia senegalensis*, and, using the path as home base, he made a series of flying sorties into the tangled mass of birds and eventually parted them.

A similar event occurred recently when the shrill cries of a number of water birds at Lake Naivasha attracted my attention to a fight involving a couple of Red-knobbed Coots, *Fulica cristata*. The most obviously agitated spectators of this battle were a number of Little Grebes *Tachybaptus ruficollis*, who were skittering across the water and diving under the combatants. Finally when both coots with claws interlocked were on their backs, barely able to keep their heads above water, a determined effort by one grebe got them apart.

Opportunism

A Black-shouldered Kite *Elanus caeruleus* sitting high in an acacia on Crescent Island, Naivasha eviscerating a mouse; about two metres below with open bill and outstretched claws, catching the little bits of dropped immards a Grey-backed Fiscal *Lanius excubitorius*, sat.

Jean Hayes, P.O. Box 14278, NAIROBI

NOTES ON LEVAILLANT'S BARBET

Levaillant's Barbet, *Trachyphonus vaillantii* is one of the larger members of the Capitonidae, and ranges over much of the southern half of Africa, north to Angola, Zaire and, in East Africa, Tanzania. It is similar to the Red and Yellow Barbet *T. erythrocephalus* so familiar to us here in Kenya but, whereas Red and Yellow is a noisy and extrovert inhabitant of the dry bush, Levaillant's is a rather more easily overlooked denizen of damper woodlands and riverine forests (Britton 1980; Roberts 1978; Snow 1978). This article records a sighting of Levaillant's in Rwanda, and comments on the species' range, and on its appearance in the field relative to illustrations in several standard texts.

The sighting was made on 10th July 1981, in the Parc National de l'Akagera of eastern Rwanda, about 10 km west of the Tanzanian border; the observers were part of a group of EANHS members from Kenya. The bird, an adult, was in woodland immediately to the west of Lac Kivumba and, at just below 1300 m, was near the top of its altitudinal range (Britton 1980). It perched in unnervingly restless and flighty fashion about 15 m up in the leafy canopy of a tall tree, and frontal and side views were obtained for a total of about two minutes before it flew off southwards.

General comment at the time agreed that the bird in life differed substantially from the illustrations in the fieldguide that we carried (Williams & Arlott 1980) (= reference WA from here on) and D.A. Turner mentioned the picture in Roberts (1978) (= reference R) as being generally more representative. Subsequent examinations of skins and reference texts show the superiority of the R illustration to be striking. The variations between the locally available illustrations of the species, museum skins (National Museum collection, Nairobi), and my brief observations are as follows.

R shows a wide, prominent, blackish breastband, narrower at the sides, and with quite large whitish spots. This was the appearance of the band on the Kivumba bird, although the central area of the band might actually have been even broader than that in the R illustration. Crude measurements on the museum skins show this breastband to be up to twice as deep centrally as at the sides. Mackworth-Praed & Grant (1957) (MPG) illustrate this band as uniformly wide right across the breast, while Williams (1963) (=W) shows slight lateral attenuation. WA do not illustrate the whole of the band, but do have its centre too high up on the breast, ie right across the base of the throat, thus omitting the yellow part of the upper breast above the band, which is shown in R.

The ornamentation on this breastband also differs between the various illustrations and between individual skins in the collection (9 specimens). MPG show perfectly regular and discrete streaks consisting of separate pale spots, while WA show some of the spots coalescing to form continuous streaks. One of the museum specimens shows single vertical and subvertical streaks produced by coalescence of spots, with the rest of the breastband relatively unspotted, but with nothing of the regularity and abundance or ornament shown in MPG and WA.

R shows reasonably irregular and prominent spotting, which again conforms to my brief impressions in the field. This type of patterning is present on several of the specimens, while others show irregular, slanting and decidely broken streaks produced by vertical rows of spots with lateral offset. The spotting on the band illustrated in W appears random but is far too obscure, while the band itself too closely resembles that on the adjacent Red and Yellow Barbet, which in fact has a much less substantial and prominent band.

The crest of the Kivumba bird was erect and prominent, and mostly black in colour, mingled with a little red; again very like R's illustration. W shows this crest relaxed, but MPG and WA omit it from their illustrations altogether, giving the bird a completely inaccurate smooth-headed appearance.

The last point is the dark mark around the eye shown in R, which the skins reveal to be accurately depicted bare or nearly so blackish skin, ie the wattle that surrounds the eyes of several of the larger Barbets, eg Red and Yellow, Double-toothed Lybius bidentatus, Yellow-billed Trachylaemus purpuratus, etc. This eye wattle was noticed in the field, and is shown in rather diminished form by MPG. W however colours it yellowish and omits its extension down and forwards to the base of the upper mandible, while WA omit it altogether to produce a very erroneous pale-faced and small-eyed effect.

With regard to the species' range, it is known from l'Akagera (J.P. van der Weght pers. comm.) but, at 1°43'S 30°45'E, the Kivumba bird was well north of its distribution as given in published standard texts. Thus Snow (1978) shows it north only to 5°s, while Britton (1980) records it north to 3°30'S for immediately adjacent western Tanzania.

I am very grateful to G.R. Cunningham van Someren for access to skins and reference texts at the National Museum, Nairobi.

REFERENCES

Britton, P.L. (ed.) 1980 Birds of East Africa. Nairobi:EANHS

Mackworth-Praed, C.W. & Grant, C.H.B. 1957 African Handbook of Birds. Series 1, Vol 1. Birds of eastern and north eastern Africa. Longmans, London.

Roberts, A. 1978 Birds of South Africa. Revised by McLachlan, G.R. & Liversidge, R. John Voelcker Bird Book Fund, Cape Town.

Snow, D.W. (ed.) An atlas of speciation in African Non-Passerine Birds. London: British Museum (Nat. Hist.).

Williams, J.G. 1963 A Field Guide to the Birds of East and Central Africa. Collins, London.

Williams, J.G. & Arlott, N. 1980 A Field Guide to the Birds of East Africa. Collins, London.

Adrian D. Lewis, Geology Dept., P.O. Box 30197, NAIROBI

EPITAPH FOR REICHENOW'S WEAVER *

What's in a name ?
A bird is a bird is a bird.
Yet learned men must analyse and check,
Minutely order you and find the word
To pin you in their list.
The weavers are a motley lot, God knows;
But you, almost alone, pert Reichenow,
Are not a chauvinist.
Black-capped your wife may be,
Yet not demure.
She shares your golden glory quite undimmed,
Your pert chirps, your passion to explore
My room for seeds, enquiring loudly as you seek.
You've always been to me the Reichenows,
An ugly name enough, yet not enough
to weigh you down or quench your cheek.

But BAGlafecht?! Who's Baglafecht ??
If lump and split they must, why so absurd
A word as this should they select,
And lay its burden on so bright a bird?

*(with due apologies to the learned men and all fervent anti-anthropomorphists.)

Joan Karmali

SNAKE INVASION IN THE EMBAKASI AREA

My house is on a sisal estate in the Embakasi area, about 20 km SE of Nairobi, in dry bush country.

During the previous years sightings of snakes were rare. During 1980 I saw snakes only three times; one Puff Adder, *Bitis arietans*, one Night Adder, *Causus rhombeatus*, and one Sand Snake, *Psammophis* sp.

My records show five sightings for the first half of 1981: two Puff Adders, one Night Adder, one Sand Snake and one House Snake, *Boaedon fuliginosus*.

Then between September and December we were invaded by snakes and the following sightings were recorded :

September :	Egyptian Cobra *Naja haje*	3	times
	Puff Adder	2	"
October :	Egyptian Cobra	1	"
	Blind Snake *Typhlops* sp.	1	"
November :	Egyptian Cobra	2	"
	Puff Adder	2	"
	Night Adder	2	"
December :	Night Adder	2	"
	Garter Snake *Elapsoidea* sp.	1	"
	Grass Snake *Psammophylax* sp.	1	" (skin only)

This gives 17 sightings during four months, as against only three for the whole of 1980.

Most of the snakes were caught and released a fair distance from human habitation, but one Egyptian Cobra, unfortunately, had to be killed. A second was sighted the following day.

To find out whether any of the released individuals would return, Alex MacKay of the National Museum's Herpetology Department kindly branded two Night Adders for me before releasing them about 1-2 km from my house. So far they have not been resighted.

I would be interested to know if any other members have experienced similar seasonal invasions in any other part of the country.

Judith Rudnai, P.O. Box 56519, NAIROBI

CARACAL IN THE ABERDARES

I refer to recent correspondence in the *Bulletin* with regard to the possible sighting of Caracal, *Felis caracal* in the Salient of the Aberdares, and also to letters concerning the Golden Cat, *F. aurata*, on the Aberdares. Mr I.W. Hardy, The Ark, Nyeri would like authenticated records of Caracal having been seen in dense forest....What information I can give is regrettably un-authenticated, but should have been, and may only add confusion to an already confused situation; but my memory of events of over 40 years ago is clearer than that of the day before yesterday, so often the case of those 'over middle age' !

In 1940, at 'under age for Military Service', I was stationed at the Kerita Forest Station on the Bamboo Forest Road (now the C68 'autobahn' to Naivasha) fretfully awaiting a replacement Forest Officer so that I could go North. In those days, Kerita Forest Station adjoined that of Uplands to the south and the

Kinangop Forest Station to the north. The eastern boundary was the Thika/Chania River and the western boundary disappeared into the Kedong Valley. This comprised some 400 square miles of forest Estate, full of elephants, some rhino, buffalo galore, leopards ad lib plus all the forest antelope, including bongo, which had ever been there; plus some 2,000 acres of plantations and 200 or so forest squatters, our labour force.

Present Forest Officers please note that we were our own game-keepers, Police and Administrative Officers, and woe betide us should one single buffalo be killed that could not be accounted for and the killer not apprehended. Our Forest Guards were, by and large, supreme trackers and policemen; they knew every square mile of the forest and there was little poaching. Elephant were a nuisance in the young plantations, and they demolished my vegetable garden behind my house so many times that I gave up the unequal battle. One irate old bull even went so far as to partly demolish one of Kitch Morson's Timber Mills, by bombarding it with fuel drums parked on an access road above the Mill. The drums were all full. It was a devastating attack ! But I digress...

Another problem was keeping leopard from developing a taste for mutton, the property of the forest squatters who were allowed, on permit, to keep a few of the local hairy breed in suitable places. We therefore had, on the books, one leopard trapper whose duty it was to ensure that such leopards which strayed from the path of a steady bush-buck diet were discouraged and/or eliminated should they show too much keeness for sheep. Our trapper was an elderly man of Kikuyu/Dorobo origin, who feared nothing; his only need periodically was some 12 feet of stranded steel wire. None of the leopard skins which he handed to me bore any mark of their demise; he merely knocked them on the head with his 'rungu'. To achieve this on a furious leopard tethered at the end of 12 foot of wire is another story, but (as I have said) he was entirely fearless or lacking any sort of imagination, whichever way one cares to look at it !

One day, before I was eventually relieved in order to 'join up', this fearless man brought in two skins, dry but obviously fresh, of an animal I did not know at all. He was, he said, sorry to have killed them, but these animals were so fierce that he feared injury to himself had he tried to release them from the snares he had set for leopard. Somewhat ruefully he said that they were 'kali kabisa' and, in plonking them on the head with his rungu, he was lucky to have come out of the fraces with a whole skin..his !

The skins were roughly (from my distant memory) two feet long from the nose to the root of the tail, with a tail of under 12 inches in length. One, the female, was slightly smaller; the other, undoubtedly tom (the old man had not excised parts of the genetalia) was a rich milk chocolate on the back and outer side of the legs, with a white belly only faintly spotted and not many of these, The female was dark chestnut with a white belly, similarly marked with faint spotting. The fur was very short, slightly longer on the underside, with a lustrous sheen. The tails of both carried the body colour, but were paler on the undersides; there was no banding nor other markings on the tail, not stripes or spots on the upperside of either skin. They were the most beautiful skins I had ever seen and in my ignorance in those bygone days, I called them Forest Lynx. It was some years later that I met with someone who did know his smaller mammals and who put me to rights...that we did not have a 'Lynx' but Caracal, and these certainly did not live in forests. Why then did I think of them as 'Lynx' ? There can surely be only two reasons; that they had tufts, or at least some longish hair, on the tips of the ears and a comparatively short tail. While the latter might just pass for F. aurata, the former (hair on the ears) most certainly would not.

I then went off to the War, such as it was, in Abyssinia and it was 18 months before I returned to Kenya on leave. My worldly goods, plus the two skins, I packed in a tin trunk and left that in an attic of a small house we had then in Limuru. I had liberally sprinkled both skins with pyrethrum powder and wrapped them in thick paper, not knowing then that the effects of this powder are very short-lived, especially when damp. On my return I found to my disgust that my precious skins were no more than bundles of hair and a few pieces of parchment. Moths, or more likely the skin-loving beetle known commonly as the 'bacon beetle', had somehow got into my tin trunk, or maybe (more likely) the eggs of same were already deposited on the skins before I so carefully wrapped them up.

These sorry remains were burned...again a mistake, for had I taken even some of the hair to the then Coryndon Museum, my skins would surely have been identified. I can only hope that all my errors may be noted by those finding the remains of animals which they do not know. Treat them liberally with table salt (for want of anything better) and get them to the National Museum in Nairobi with all speed. Do not think, as I did, that the animal would in any case be well known; most are, but there are still some eagerly awaited by the scientific world.

There can be no conclusion to the identity of these animals, but it is likely they were Golden Cats and that they probably still exist on the Aberdare range in small numbers. Although some authorities recognise two races of this cat, the race with tufted ears is still to be discovered !

Tim Barnley, P.O. Box 332, KITALE, Kenya

CAMP AT EL KARAMA RANCH

Tagging along with a Society outing led by Lise and Tim Campbell over 26th February to 1st March 1982, we re-visited an old favourite, the El Karama Ranch owned by Guy and Lavinia Grant.

This 12,000 acre spread near Nanyuki seems to be equally devoted to supporting wildlife as it is to raising purebred cattle, as Mr Grant's honorary game warden status testifies, and the self-service tented camp, situated on the Uaso Nyiro River is an excellent base for enjoying the area. Days are hot, but the evenings at 6,400 feet altitude are delightfully cool, and the bucket of hot water supplied each morning by the askari was most welcome.

It's about a 3 hour drive from Nairobi, all tarmac except for the final 42 kilometres, and a detailed and explicit directional map is available upon booking at the A.A. Headquarters in Westlands. The camp consists of 10 shaded tents equipped with the appropriate furniture (beds, tables, chairs, etc.) and such extras as lanterns, bedding, cooking utensils and cutlery can be rented for a nominal fee.

Our motley crew, ranging in age from one to seventy nine, drifted in over Friday and Saturday until some 20 groups had arrived, and all were soon involved in the multiple activities available.

A favourite was the early morning foot safari conducted by an experienced tracker. Just ponder . . I believe a game drive at most lodges currently runs around Shs 700/- per morning. Ours cost Shs 10/- per head and we encountered more wildlife on a two hour walk than I have seen anywhere outside the Mara. Oryx, zebra, giraffe, jackal, tommies, impala and waterbuck grazed while a hare exploded from under our feet, and a Kori bustard permitted pictures from a short distance. Matter of fact, in a colourful ceremony, one member was drummed out of the Society that evening for failing to spot any of the 400 head of Reticulated and Masai Giraffe that roam the ranch.

The walks start out briskly enough as our guide and protector took off in a deceptively smooth and apparently slow stride, but I soon found myself panting softly. Being with a group of experiences Kenya hands, I was determined to die rather than admit that my pulse doesn't usually pound at 120 beats per minute, so it was with great relief that I heard one veteran of such treks mutter "what is this - the Saturday morning run?".

All were soon cooperating in slowing the procession by ostensibly making a great fuss over the surrounding brown jobs that fluttered by including the Rattling Cisticola, Rufous Chatteres, Grey-backed Cameroptera, Tawny-flanked Prinia, Yellow-spotted Petronia, and what's-that wheatear. More sincere interest was aroused though when someone identified the Yellow-bellied Eremomela.

Bored to tears our tracker disconsolately surveyed the terrain and came up with some very recent lion spoor thus motivating the straggler to bunch up, and to make us more appreciative of the canon he was carrying.

For the foot sore, horses with syce were available, while some found that bird watching can be done adequately just sitting comfortably on the river bank, fishing pole at the ready for an unwary catfish or barbel.

Evening strolls along the river with those most capable birders and botanists, Lise Campbell and Yvonne Malcolm Coe, produced sightings of Grey-headed Bush Shrike, Brown Parrot, Pygmy Flacon (a first for the permanent list of the camp), a pair of African Black Ducks and a multitude more.

The camp's life list of mammal sightings include Clawless Otter, Aardvark, Aardwolf, Caracal, Hunting Dog and other oddities which, after five years of determined search, I am firmly convinced do not actually exist.

Some of the entomologically orientated members were apparently deeply distressed by the lack of night-flying specimens, but most of the camp survived uncomplainingly without moths, midges and mosquitoes competing for the evening meal.

Of course most dudu collectors have to be flat nuts (Editors note: this is the personal opinion of the reporter, and while an investigation to support or refute his observation is now being carried out by the Royal Academy of Natural History, it has not yet been confirmed), but the wife (no collector she) stridently proclaimed the presence of the not uncommon Rufous and carmine striped tick (Pruritanicus hemorrhageicum subcutaneoso) which had been dispatched (minus the head which was difficult to extract considering where it was lodged) to the museum for further study.

The community campfire each night resulted in newly found friends, the usual exchange of fabrications ("there I was face to face with the leopard - or elephant - or gorilla") and an amazing drain on Kenya's beer inventory. But that's what any scientific gathering is all about, isn't it ?

So visit El Karama for a memorable experience, or better, join the Society and enjoy similarly superb settings regularly.

Bill Shadel

FOR SALE

Mike and Caroline Gilbert and going, so for sale :
Subaru 4 wheel drive estate, 1978. Shs 78,000/-
All camping equipment
Binoculars, Books, Furniture, Fridge, Cooler etc.
Also :
Suzy, fetching female (spayed) labradore type,
Pilsner, ancient worthy dog
Peterkin, 5½ kilo personable (neutered) cat need a good home.
So roll up, roll up, or telephone 48571 or see Mike in the Herbarium.

WANTED

Uganda Journals please, as follows :
- Anything before volume 10 of 1946
- Vols 15 and 16 of 1951 and 1952
- Vol 18, part 1 of 1954
- Vol 33, part 2 of 1969
- Vol 36 of 1972 and all following to present.

These are required for purchase or for exchange with spare copies of mine. These are : Vol 10, No 2 of 1946; Vol 11, 2, '47; Vol 12, 1&2, '48; Vol 13,1,'49; Vol 14,1,'50; Vol 17,1,'53; Vol 18,2,'54; Vol 19,1,'55; Vol 21,1,'57; Vol 28,2,'64; Vol 29, 1 & 2, '65; Vol 30,1,'66; Vol 31,1&2,'67; Vol 32, 1&2,'68; Vol 33,1,'69.

Please contact Jean Hayes, P.O. Box 14278, NAIROBI

Trees of Southern Africa by Keith Coates Palgrave. One copy needed urgently. Please contact the Society's Secretary, P.O. Box 44486, Nairobi phone 742132.

SOCIETY NOTES

The following books are available to members from the Society's office in the National Museum.

Birds of East Africa, P.L. Britton (ed.), published by the Society. Detailed accounts of habitat, distribution and ststus. Shs 130/-.

Breeding Seasons of East African Birds by the late Leslie Brown and Peter Britton, published by the Society, Shs 80/-

Check List of the Birds of Kenya, a book which is proving very popular to members, Shs 10/-.

Williams and Arlott, *A Field Guide to the Birds of East Africa*, only two copies remaining Shs 175/-.

Williams, *A Field Guide to the National Parks of East Africa*, new edition, Shs 150/-.

Bundu Series *Some Well Known African Moths*, an excellent small guide which covers many local species, Shs 45/-.

Reynolds, *Aloes of Tropical Africa and Madagascar*, Shs 240/-, only two copies remaining of this difficult to obtain book.

R.O. Williams, *Useful and Ornamental Plants of Zanzibar and Pemba*, an excellent guide to coastal plants and their uses, all slightly damaged having been stored in a warehouse in Zanzibar for years, Shs 80/-.

Faces of Kenya, David Keith Jones' classic, Shs 260/-

Birds of the African Rain Forest, mostly bird sounds (and a few mammals) recorded by Stuart Keith in the tropical rain forests of Budongo, Bwamba, the Impenetrable, Marsabit, the Usambaras, Kakamega, Sokoke and Mount Kenya, two 33 r.p.m. records for just Shs 90/-

Important Reprints from the Society's Journal :

Andrews, Groves and Horne; Ecology of the Lower Tana Flood Plain (Kenya) No 151 Shs 7/-

Ament; The Vascular Plants of Meru National Park, Kenya. No 154 Shs 8/-

Isaac; Marine Botany of the Kenya Coast, Parts 1 - 5, Nos 114, 116, 122. Shs 50/- per set

Napper, Cyperaceae in East Africa, Parts 1 - 5, Nos 106, 109, 110, 113 and 124 Shs 90/- per set

Reynolds; Notes on Aloes from South Ethiopia and Somalia. No 95 Shs 2/-

Carcasson; The Milkweed Butterflies of East Africa (Lepidoptera; Danaidae) No 106 Shs 5/-

Pinhey; The Emperor Moths of Eastern Africa. No 98 Shs 10/-

Spawls; A Check List of the Snakes of Kenya. No 167 Shs 8/-

Backhurst, Britton & Mann; Less Common Palaearctic Migrant Birds of Kenya and Tanzania No 140. Shs 9/-

Britton & Zimmerman; The Avifauna of Sokoke Forest, Kenya, No 169 Shs 15/-

Brown; Observations on Verreaux's Eagle Owl in Kenya. No 111 Shs 2/-

Lack, Leuthold & Smeenk, Check List of the Birds of Tsavo East National Park, Kenya. No 170 Shs 15/-

Mann; Some Recent Changes in our Knowledge of Bird Distribution in East Africa. No 157 Shs 10/-

Reprints by R.E. Moreau can also be supplied :

The breeding of a Paradise Flycatcher. Shs 3/-

A note on the distribution of the Vulturine Fish Eagle Shs 3/-

Car Stickers Still plenty in stock, so please help us to advertise the Society by displaying one on your car. Shs 2/- each.

Informal Notes Sets of 12 cards of 6 different designs, with envelopes, air mail weight. Shs 10/- per set.

Thanks to all those who have so kindly supplied copy for this issue of the Bulletin. There was not enough space to include all the interesting material in this issue, so the May/June part will also be full of interesting notes, records and observations. However, please keep copy coming in, the more the better, on any natural history subject of your choice. Please send to The Editor, EANHS, P.O. Box 44486, Nairobi. Many thanks.

Office Hours - Important Notice As from the 29th March 1982, the Society's office will be CLOSED on Mondays, and open from Tuesdays to Fridays, 9 a.m. to 11.30 a.m.; 2 p.m. to 3.45 p.m. and on Saturday mornings from 9.30 a.m. to 11.30 a.m.

Location of Office - Reminder The Society's office is now sutuated at the back of the National Museum, come through the back door, up the steep wooden stairs, first office on your right. Due to recent thefts from this office, the door may be locked, so please knock loudly for admittance.

Nest Record Scheme cards A reminder to all members who see birds carrying nesting material, on a nest, or feeding young, cards for the Society's Nest Record Scheme can be obtained from the office FREE OF CHARGE.

Nest Record Scheme - Important Change of Address Please note that the address for the Nest Record Scheme Organizer is now

MR P.B. TAYLOR, P.O. Box 25138, NAIROBI

Correction to Mr Grant's advertisment in the January/February Bulletin - due to a very bad telephone line from Laikipia, we misunderstood the wording which should be:
Secretary/Bookkeeper - Kenya citizen secretary/bookkeeper who would enjoy living/helping on a homely, isolated Laikipia ranch. Moderate SALARY. Free hours and considerable perks. Please contact Mr I.G.P. Grant, El Karama Ranch, P.O. Box 172, NANYUKI, telephone Laikipia 34Y2. Our apologies, Mr Grant.

EXTRA-ORDINARY GENERAL MEETING

An Extra-Ordinary General Meeting of the East Africa Natural History Society will be held on Monday 5th April 1982 at 5.30 p.m. in the Museum Hall, Nairobi, before the lecture.

AGENDA

To approve the accounts for the year 1981, with the Hon. Treasurer's Report.

D. Angwin
Secretary

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Neal Aggarwal, P.O. Box 48620, NAIROBI
Mr and Mrs Allen, P.O. Box 14411, NAIROBI
Marcia Borgeson, P.O. Box 45009, NAIROBI
Mrs D. Campbell, P.O. Box 25222, NAIROBI
Miss J.A. Donker, Netherlands Embassy, P.O. Box 41537, NAIROBI
Elisabeth Fonville, P.O. Box 46582, NAIROBI
Gakahu Christopher Gatama, Zoology Dept., P.O. Box 30197, NAIROBI
Mr and Mrs Juselius, P.O. Box 61214, NAIROBI
Mr and Mrs Wolfgang Landthaler, c/o German School, P.O. Box 44038, NAIROBI
Mr and Mrs van Oosterwyk, P.O. Box 1230, ELDORET, Kenya
Mrs Frances Prew, c/o Canadian High Commission, P.O. Box 30481, NAIROBI
Dr and Mrs Arthur J. Rollins, U.S. Embassy, P.O. Box 30137, NAIROBI
Mr Dieter Rottcher, P.O. Box 29231, KABETE, Nairobi
Ann Elizabeth Taylor, P.O. Box 135, KERICHO, Kenya
Mrs B.E. Willard, P.O. Box 30171, NAIROBI

Local Junior Members

Rajesh B. Gadher, P.O. Box 42051, NAIROBI
K.I. Gathecha, P.O. Box 24931, NAIROBI
Silvester Hasusa, Marsabit House, Nairobi School, P.O. Box 30047, NAIROBI
L. Kathuli, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
F.N. Mburu, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
Sajid Marza, P.O. Box 43336, NAIROBI
Edson Mpyisi, Nairobi School, P.O. Box 30047, NAIROBI
Eddie M. Muriuki, Elgon House, Nairobi School, P.O. Box 30047, NAIROBI
Stephen M. Nandwa, P.O. Box 298, KERUGOYA, Kenya
Nicholas K. Njogu, Athi House, Nairobi School, P.O. Box 30047, NAIROBI
Norman Siefuddin, P.O. Box 14280, NAIROBI

Local Institutional Member

Kianda High School, P.O. Box 48328, NAIROBI

Change of Status to Life Membership

Dr and Mrs Mutinga, P.O. Box 43904, NAIROBI

Overseas Full Members

Robert and Audrey Faden, 2915 Sycamore St., Alexandria, Va 22305, U.S.A.
Mr J.D. Hutchinson, Bolfracks, Aberfeldy, Perthshire, PH15 2EX, SCOTLAND.
Dr T.J. Kingston, 82 O'Neill Street, Lilyfield, Sydney, N.S.W. 2040, AUSTRALIA
J. Westoll, Dykeside, Longtown, Cumbria, ENGLAND
Dr Kurt Hoffmeier, Fuerstenbergerstrasse 219, 6000 Frankfurt a.M., Germany

SOCIETY FUNCTIONS

9th-12th April 1982 EASTER week end camp at Nomotio, near Maralal. Leader Mr R. Morgan. Distance from Nairobi 215 miles (345 km). Camping will be on private land at 7.200 feet and nights are cold. Interesting game and birds in the nearby sanctuary and river valley. Botanic interests will also be well catered for. Losiolo View Point on the eastern wall on the Rift Valley is about 16 miles away and very spectacular. If rains are early this is a 4-wheel drive trip. Members will need full camping equipment, food and water as well as petrol for the return journey. There is no petrol nearer than Thomson's Falls (Nyahururu). Members wishing to join this field trip should please fill in the enclosed form and return it to : Mrs A.L. Campbell, P.O. Box 14469, NAIROBI and enclose a stamped addressed envelope. Further details will then be forwarded.

Monday 5th April 1982 in the Museum Hall, Nairobi at 5.30 p.m. EXTRA-ORDINARY GENERAL MEETING, to be followed by "A little geology, a lot of landscape...and a camera". An illustrated talk on geology, scenery, wildlife and anything else photogenic in varoius parts of Kenya, given by Dr Adrian Lewis of the Geology Department, University of Nairobi.

Sunday 11th April 1982 Informal Day trip. Please meet at the National Museum at 9 a.m.

Monday 10th May 1982 Mr M.E.J. Gore of the British High Commission will give an illustrated lecture on "Birds across the Continent - a comparison of the birds of the Gambia and Kenya". Museum Hall, Nairobi at 5.30 p.m.

Sunday 16th May 1982 A proposed trip on the Athi River. Unfortunately details are not yet available, and will be printed in the next Bulletin.

N.B. The proposed Madaraka Day camp to Colcheccio has unfortunately had to be cancelled due to the exorbitant leap in prices at the lodge. See the next Bulletin for full details of this weekends activities.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Prof. J.O. Kokwaro
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton **(Editor EANHS Bulletin),** Mr. S.G. Njuguna, Dr. D.J. Pearson.
Co-opted Members: Mrs. H. A. Britton (Nest Record Scheme Organizer), Mrs. F. Ng'weno, Dr. A. Hill, Dr. F. Owino.
Journal Editorial Sub-Committee : Mrs. J. Hayes, M. Gilbert, Prof. E. Lucas.
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, P.L. Britton, Mrs. H.A. Britton, P.B. Taylor, Dr. K. Howell, J. Beesley (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds (United Kingdom).
Joint Library Sub-Committee : (Society representatives) Prof. J.O. Kokwaro, M.P. Clifton.
Functions Sub-Committee : Mrs. A.L. Campbell, Mrs. E.B. Angwin, M. Gilbert.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor **(EANHS Bulletin),** Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
S1
NH

E A N H S

BULLETIN

publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN MAY/JUNE 1982

CONTENTS

Report on a Walking and Camel Safari in Tsavo East National Park 54
Lammergeyer in Amboseli 61
Honey Buzzard and Bees 61
Ovampo Sparrowhawk at Karen 62
Birds as Snake Detectors 62
Chairmans Report for 1981 63
A Bird Atlas for Kenya 64
The C.J.P. Ionides Memorial Fund 70
For Sale 71
Wanted 71
Society Notes 72
New Members 73
Society Functions 74

REPORT ON A WALKING AND CAMEL SAFARI
IN TSAVO EAST NATIONAL PARK

Introduction

The following notes describe some of the wildlife and habitats seen during a week-long walking safari in Tsavo East National Park, Kenya, from 10th to 17th December 1981.

The route chosen provided an opportunity to explore the numerous low hills that rise from the Tsavo plain, some 25 km north of the Galana River, at the easternmost extension of the Yatta Plateau, and also demonstrated the possibility of taking camels from the river over the top of the Yatta itself.

Food, water and equipment for the trip was carried by five camels with a sixth saddled for riding. This was easily sufficient to support eight people, including three herders to tend the camels.

The route through the Yatta Plateau was that of an elephant path, indicated on the Map (see facing page). It proved to be one of the highlights of the safari, following this age-old path cutting down a very steep gorge the camels carried the baggage without faltering.

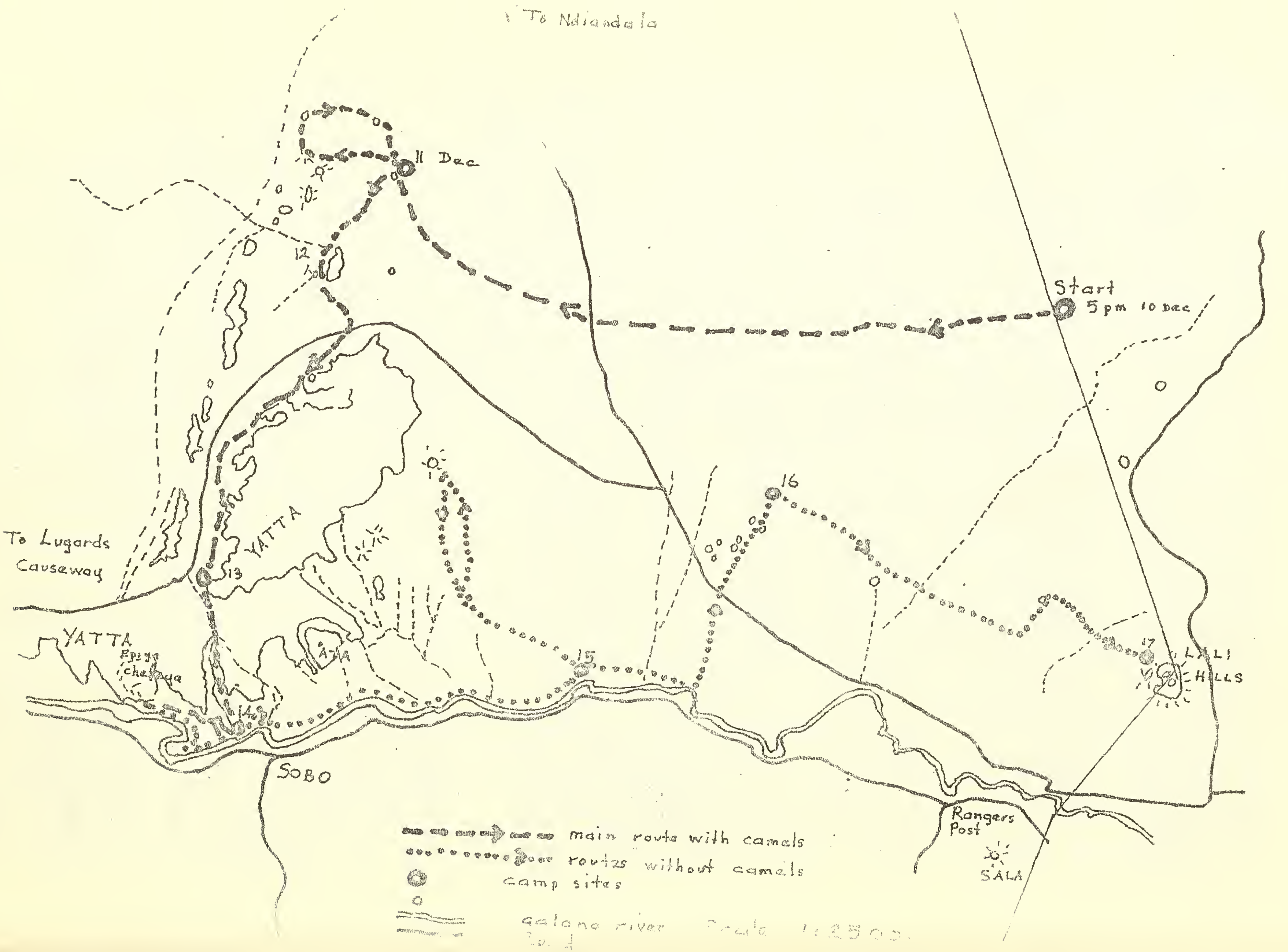
Habitats on the Route

The details of the route are shown on the map. Broadly, the habitats may be divided into four sections along the line of march :-

Section 1 - 10th and 11th December - Crossing the plains from the Galana Ranch border to the Yatta. The general aspect was of a flat or gently undulating red soil plain, vegetated with a bushed grassland. Much of the area was relatively dry, and evidently had not received recent rain. Dominant grasses included *Chrysopogon*, *Chloris* and *Eragrostis*. The predominant bush was *Cordia sinensis* (*C. garaf*) with patches of *Premna resinosa* and *Carphalea* (*Dirichletia*) *glaucesens*. The commonest tree appeared to be *Boscia coriacea* with *Delonix elata* forming scattered stands on the catena 'ridges', and widely spaced *Euphorbia robechii*.

Section 2 - 11th to 14th December - In truth an area of diverse habitat, incorporating the outcropping lava hills and the red soil plains between them. This area had received more recent rain as witnessed by the numerous flowering grasses, herbs and legumes; and a densely vegetated lugga, showing signs of recent water flow at the northern end of the section. Important grasses were *Eragrostis* and *Chloris* with a flush of less numerous *Brachiaria*, *Panicum* and *Leptothnum* (*Latipes*). A species with a feathery white flower head resembling a *Schmistia* was abundant, but unknown to us. Flowering *Commelina*, *Abutilon* and *Cleome* again attested to recent rain, and amongst trees, *Platycelyphium voenae* and *Cassia* were both more abundant then previously.

The vegetation of the rocky outcrops, hills and pass through the top of the Yatta itself was substantially different. Also interesting differences were noted in the vegetation of hills that were close together. For example, the northernmost hill of the range supported *Commiphora* trees with dense patches of *Sansevieria* and aloes underneath, growing between boulders. The hills immediately to the


To Ndiandala
11 Dec
12
D
Start
5 pm 10 Dec
To Lugards Causeway
YATTA
13
YATTA
Epiya chalaya
A-A
B
14
15
16
17
SOBO
LALI HILLS
Rangers Post
SALA
main route with camels
routes without camels
camp sites
Galana river
road
Scale 1:250 000

south were likewise boulder-strewn, but supported a more diverse vegetation, notably several *Euphorbia* species, a fig, *Ficus* sp., and at least two species of *Dorstenia*.

On other outcrops some notable plants included *Tylosema* sp. and *Thunbergia guerkeana*. Near the top of the Yatta (and subsequently along the river) many of the *Dobera glabra* trees had attained very great size with massive trunks and twisting, often broke, limbs.

Section 3 - 14th to 15th December - Refers principally to the river and the vegetation supported by it; notably the saltbush, *Suaeda monoica*, the doum palm, *Hyphaene*, and the stands of *Acacia elatior*.

Section 4 - 16th to 17th December - The return trip towards Lali Hills, again over red soil plains that had recently received rain. This was principally a gently undulating area of open grassland with widely scattered trees, mostly small *Boscia coriacea* with less frequent *Delonix elata*. The grasses, very green and flowering, were dominated by *Aristida* and *Eragrostis* with another unknown to us, but reminiscent of a *Digitaria* type. The area was intersperced with isolated patches of denser thicket and waterholes both large and small.

Observations of Mammals

Most mammals seen on the trip, were, somewhat predictably, found along the river or in the greener areas covered on the 12th and 16th December. The most widespread and frequently seen species was the Peter's Gazelle, *Gazella granti petersi*, a few of which were seen on most days of the safari, but large groups of twenty or so were also seen at the river, in the company of Waterbuck, *Kobus ellipsiprymnus* and Impala *Aepyceros malampus*. A small group of Oryx, *Oryx beise callotis* were also present at the river, but a larger herd of thirty or so had previously been seen at the furthest point from the river on the 11th and 12th December. Several groups of Zebra, *Equus burchelli*, and a small number of Eland, *Taurotragus oryx* were also present in this area, and an Aard-wolf, *Proteles cristatus*, was seen on the late afternoon of the 12th December.

Tracks of Giraffe, *Giraffa camelopardalis*, and Buffalo, *Syncerus caffer*, were in evidence on the northern part of the route, but neither of these species was seen until the river was reached. A small group of bull buffaloes was seen wallowing at the river's edge, and the giraffe were seen on a walking excursion away from the river on 15th December.

Fresh signs of elephant were first encountered on the first evening of the trip, when tracks and warm dung were found just before nightfall. However, there was no further encounter until the early morning of the 16th, when a large herd was seen moving southwards in the far distance; it was not possible to count the numbers present, but the distance between leading animals and tail-enders suggested there may have been over a hundred.

A hippo was heard in the river near Sobo, and at least two groups of lion were heard roaring at 4 p.m. in this area following rainfall. Lions were again heard roaring 20 km downstream on the night of 15th December, and the following day a group of five were encountered at close quarters resting amongst saltbush on the river bank at noon. This group provided considerable excitement, as the lions had chosen the exact same spot to rest as ourselves. On pushing the camels through very thick saltbush, to some fine Acacia elatior trees by the river bank, lions started popping about like startled ferrets, the camels not being the least bit perturbed. It was also interesting to note that the camels, having been outspanned, were grazing peacefully not more than 50 yards from an isolated patch of saltbush where one lioness had remained. She was noticed by the herder and flushed out in full view of us all. Comparatively few smaller mammals were seen; however, a number of packs of dwarf mongoose, Helogale parvula, were spotted amongst the boulders on some of the rocky outcrops of the Yatta, and large white stains on many of the steeper slopes bore witness to the presence of rock hyrax (Hyracoidea), although these were only seen by one of us. A single honey badger, Mellivora capensis, was encountered among boulders high up on the south side of the Yatta.

Three other species were notable by the infrequency or absence of sightings: in eight days in Tsavo, only two Dik-Dik, two Geranuk and no Lesser Kudu were seen.

Observations of Birds

Birdlife was abundant at all stages of the trip, and a list of those seen is appended. Only birds positively identified have been included, and several species were noted that were beyond the abilities of the observers to identify; as a result, two suspected species of lark, a cisticola and a warbler have been left out. Also a brown chat-like bird, with a distinctive black and white tail pattern was seen in the pass through the Yatta, that is probably readily identifiable to a more experienced observer.

One species was seenthat is not listed by Lack, Leuthold and Smeenk in their Check-list of the Birds of Tsavo East National Park, Kenya: the Chestnut Sparrow, Passer eminibey. A small flock containing males and females was seen in a Delonix tree, containing an actively nesting colony of Black-capped Social Weavers, Pseudonigrita cabanisi, on 16th December. Two nesting colonies of this weaver were seen within a mile of each other, and both colonies were being harassed by Didric Cuckoos, Chrysococcyx caprius.

Evidence of breeding in other species came from the Taita Fiscal, Lanius dorsalis, an adult of which was seen feeding an immature bird on 12th December, and the Vulturine Guineafowl, Acryllium vulturinum. A solitary bird of this species was found sitting on eleven eggs in a shallow nest partially concealed by an overhanging bush some thirty metres from a waterhole on 16th December.

More circumstantially, Green-winged Pytilias, Pytilia melba were abundant in and around the hills of the Yatta, and it was in the same area that the Paradise Whydah, Vidua paradisaea, that parasitises the nests of the Pytilia was seen.

An unusual sighting was of a single Heuglin's Bustard, Neotis heuglini, on the afternoon of 15th December, on the plains about a mile north of the river. The bird was flushed from the ground, and the large size and black face mask of the male bird were clearly seen.

Conclusion

We would like to express our appreciation to Mr J. Kioko, the Warden of Tsavo East National Park, for permitting the party to walk through this particularly isolated part of the National Park.

One of the main reasons for the safari was to explore the possibility of conducting specialised tourist groups through some interesting and little known country, and also to ascertain how practical camels would be in overcoming various obstacles, such as crossing the Yatta plateau.

We were all of the opinion that such an expedition was full of interest, and we considered ourselves privileged to have had this unique opportunity.

The first evening we walked for some three hours at night, under a good moon, which put us all in the true frame of mind. There is something very special about walking with camels in the moonlight, and knowing that there are no other human beings within at least sixty miles.

There is also something very exceptional about being able to walk through this attractive bush country without seeing any sign whatsoever of any human habitation or disturbance, just as Africa was, many hundreds of years ago. Surely for some this experience would be priceless.

Check List of Birds

Common and scientific names follow Britton (ed.) 1980, Birds of East Africa, Nairobi:EANHS; the numbers after the latin name are the sections on which the bird was seen, followed by notes on the species.

Ostrich, *Struthio camelus*, 2-4, somali race *molybdophanes*
Cormorant sp., 3, single bird flying upstream, species uncertain
Grey Heron, *Ardea cinerea*, 3, several at river
Goliath Heron, *A. goliath*, 3, two pairs at river
Black-headed Heron, *A. melanocephala*, 3, several at river
Yellow-billed Egret, *Egretta intermedia*, 2, single bird flying towards river
Egyptian Goose, *Alopochen aegyptiacus*, 3
Knob-billed Goose, *Sarkidiornis melanotos*, 4, single bird at waterhole
Secretary Bird, *Sagittarius serpentarius*, 4, pair roosting in tree, no nest
White-faced Vulture, *Trigonoceps occipitalis*, 1
Montagu's Harrier, *Circus pygargus*, 4, birds identified by males
Bateleur, *Terathopius ecaudatus*, 1-4
Shikra, *Accipiter badius*, 4, single bird hunting Quelea
Steppe Eagle, *Aquila nipalensis*, 1-4, some birds probably Tawny Eagles
Augur Buzzard, *Buteo augur*, 2, single bird in pass through Yatta
Pale Chanting Goshawk, *Melierax poliopterus*, 1-4
Black-shouldered Kite, *Elanus caeruleus*, 4, two overhead together
Eastern Red-footed Falcon, *Falco amurensis*, 4, single bird overhead
Lanner Falcon, *F. biarmicus*, 3, single bird hunting Quelea at river
Kestrel, *F. tinnunculus*, 4
Harlequin Quail, *Coturnix delegorguei*, 1-4, very numerous everywhere

Yellow-necked Spurfowl, *Francolinus leucocepus*, 2-3, calling frequently

Crested Francolin, *F. sephaena*, 2-3, noticeable in luggas near river

Vulturine Guineafowl, *Acryllium vulturinum*, 4, nesting. Birds heard on Yatta thought to be Helmeted Guineafowl

Button Quail, *Turnix sylvatica*, 1-4, single birds often seen with Harlequin Quail

Hartlaub's Bustard, *Eupodotis hartlaubii*, 1, a pair near the Galana border

Buff-crested Bustard, *E. ruficrista*, 1,2,4

Heuglin's Bustard, *Neotis heuglini*, 4

Mongolian Sandplover, *Charadrius mongolus*, 3, single bird with Kittlitz's

Kittlitz's Sandplover, *C. pecurius*, 3

Three-banded Plover, *C. tricollaris*, 4, at waterhole

Crowned Plover, *Vanellus coronatus*, 3

Spur-winged Plover, *V. spinosus*, 3

Black-headed Plover, *V. tectus*, 1-4

Common Sandpiper, *Actitis hypoleucos*, 3

Greenshank, *Tringa nebularia*, 3

Little Stint, *Calidris minuta*, 3

Spotted Thicknee, *Burhinus capensis*, 1

Cream-coloured Courser, *Cursorius cursor*, 3, single flock near river. Common on Galana Ranch

Heuglin's Courser, *Rhinoptilus cinctus*, 1, bird disturbed by camels at midday

Black-faced Sandgrouse, *Pterocles decoratus*, 1-4

Chestnut-bellied Sandgrouse, *P. exustus*, 3, two small flocks near river

Namaqua Dove, *Oena capensis*, 1-4

Ring-necked Dove, *Streptopelia capicola*, 1-4

Laughing Dove, *S. senegalensis*, 1-4

Emerald-spotted Wood Dove, *Turtur chalcospilos*, 2

White-bellied Go-away Bird, *Corythaixoides leucogaster*, 3

Didric Cuckoo, *Chrysococcyx caprius*, 4, around weaver colonies

Black and White Cuckoo, *Clamator jacobinus*, 2-4

Eurasian Cuckoo, *Cuculus canorus*, 2

African Cuckoo, *C. gularis*, 4

White-browed Coucal, *Centropus superciliosus*, 2

Verreaux's Eagle Owl, *Bubo lacteus*, 4, single bird at Lali

Donaldson-Smith's Nightjar, *Caprimulgus donaldsoni*, 1-4, other species were seen but not identified

Little Swift, *Apus affinis*, 2

Eurasian Swift, *A. apus*, 2

Alpine Swift, *A. melba*, 2, single bird with other swifts

Eurasian Swallow, *Hirundo rustica*, 1-4, very numerous

Wire-tailed Swallow, *H. smithii*, 3

Drongo, *Dicrurus adsimilis*, 1-4

Common Bulbul, *Pycnonotus barbatus*, 2-3, common on hills and river vegetation

White-browed Scrub Robin, *Cercotrichas leucophrys*, 2-4, singing and scolding on hills

Rock Thrush, *Monticola saxatilis*, 1,2,4

Isabelline Wheatear, *Oenanthe isabellina*, 1,2,4

Northern Wheatear, *O. oenanthe*, 1-4

Pied Wheatear, *O. pleschanka*, 4

Grey Wren Warbler, *Camaroptera simplex*, 1-4, heard frequently, seen on Yatta

Ashy Cisticola, *Cisticola cinereola*, 1-4, many singing

Pale Prinia, *Prinia somalica*, 2, singing on rocky outcrops with heavy bush cover

Whitethroat, *Sylvia communis*, 2, one bird on hill
Northern Crombec, *Sylvietta brachyura*, 2
Black-headed Flycatcher, *Batis minor*, 3, seen close in Acacia overhanging river
Pangani Longclaw, *Macronyx aurantiigula*, 1
African Pied Wagtail, *Motacilla aguimp*, 3
Golden Pipit, *Tmetothylacus tenellus*, 1,2,4
Slate-coloured Boubou, *Laniarius funebris*, 3, heard and seen in saltbush
Rosy-patched Shrike, *Rhodophoneus cruentus*, 2-4
Three-streaked Tchagra, *Tchagra jamesi*, 2, on hills
Taita Fiscal, *Lanius dorsalis*, 1,2,4
Red-tailed Shrike, *L. isabellinus*, 1-4
White-crowned Shrike, *Eurocephalus rueppelli*, 1,2,4
Golden-breasted Starling, *Cosmopsarus regius*, 2-4
Wattled Starling, *Creatophora cinerea*, 2-4, flocks frequent in greener areas
Magpie Starling, *Speculipastor bicolor*, 2,3,4, many small flocks
Fischer's Starling, *Spreo fischeri*, 1,2,4
Hildebrandt's Starling, *S. hildebrandti*, 2, one bird with Superb Starlings
Superb Starling, *S. superbus*, 1,2,4
Hunter's Sunbird, *Nectarinia hunteri*, 2-4, males in sub-adult plumage seen
Red-billed Quelea, *Quelea quelea*, 1,3,4, numerous flocks, none exceptionally large
Red-billed Buffalo Weaver, *Babalornis niger*, 1-4, nesting colonies numerous
White-headed Buffalo Weaver, *Dinemellia dinemelli*, 1,2,4
Black-capped Social Weaver, *Pseudonigrita cabanisi*, 4, two nesting colonies seen
Chestnut Sparrow, *Passer eminibey*, 4, single flock in tree with nesting Black-capped Social Weavers
Grey-headed Sparrow, *P. griseus*, 1,2,4
Yellow-spotted Petronia, *Petronia pyrgita*, 4
Pin-tailed Whydah, *Vidua macroura*, 4
Paradise Whydah, *V. paradisaea*, 2, seen where Green-winged Pytilia numerous
Green-winged Pytilia, *Pytilia melba*, 2,3,4, noticeably more frequent than on Galana Ranch
Silverbill, *Lonchura malabarica*, 3, two flocks in grasses beside river
Somali Golden-breasted Bunting, *Emberiza poliopleura*, 1-4
Cinammon-breasted Rock Bunting, *E. tahapisi*, 2, a small flock on one of the northern hills
Yellow-fromted Canary, *Serinus mozambicus*, 2, single bird singing on top of Yatta

(Due to limited time, this bird list was not handed to the Society's Ornithological Sub-Committee for comment. Ed.)

G. Powiss & T. Wacher, c/o Section of Ornithology,
P.O. Box 40658, NAIROBI

LAMMERGEYER IN AMBOSELI

Some ornithologists may be interested in the sighting of a Lammergeyer, Gypaetus barbatus, at Amboseli on the mornings of 2nd and 3rd February 1982. It seemed on both occasions to be interested in the rubbish dump at the rear of the African Safari Club servants quarters. Easily identified in the air, the Lammergeyer also settled on the ground near the dump, and this gave several observers a very good view of it.

Stan Bleazard, P.O. Box 25167, NAIROBI

HONEY BUZZARD AND BEES

It was around 10.30 hrs on Sunday 24th January 1982, at Miotoni, Karen, west of Nairobi, when a bird of prey flew across the lawn in front of the house. My wife asked "what was that", amd I answered "pale phase of the Honey Buzzard, Pernis apivorus, a Palaearctic migrant". I noted this in my note book, the 29th species seen during the morning.

At midday a (the?) Honey Buzzard flew across the lawn and into a fig tree to the west and alighted on a branch in clear view but it was followed by a stream of bees which flew around the bird's head in a vicious manner with the bird repeatedly swishing its head up and down and side to side. Bees were all over the place; some came into the house, we hastily shut windows. My son Ian was stung, the dog went crazy with a bee well embedded in its back. Other windows were shut, the house servant rushed in, bees were everywhere.

On the line to the east of the house the washing was hanging out and bees swarmed in their hundreds over a pair of dark trousers particularly attacking the waistband and bottom of the legs (where most moisture would be retained) but they did not go for white or other coloured items.

From the safety of the lounge window we noted vast numbers of bees milling around the top of a creeper-clad tree, covered with a cactus, Cissus sp. and Hippocratea. At 12.15 hrs the Honey Buzzard moved to the forest behind the house, then moved over to a large 'muhugu' tree near the creeper-covered tree. It sat for some minutes then dived into the creeper where it was met by a 'million' bees and it hastily retreated again, followed by a swarm of bees. We then lost sight of the bird.

At 15.30 hrs I ventured forth to check on the creeper. Bees were still active, going to and fro. I was able to get under the tree but could find no pieces of comb or see any hive which must have been well hidden in the dense tangle. So it would appear that the Buzzard had been unable to feed.

On 3rd February, at 18.05 hrs, a (the?) Honey Buzzard flew across the garden on front of the house and settled at the forest edge. The house servant and I eventually found it settled, and sat down to watch. At 18.10 it flew straight to the top of the creeper and with wings flapping tried to penetrate the mass of bees; however it failed. It was surrounded by angry bees and it left, persued by bees.

G.R. Cunningham van Someren, P.O. Box 40658, NAIROBI

OVAMPO SPARROWHAWK AT KAREN

It may interest some of your members to know that an Ovampo Sparrowhawk, Accipiter ovampensis, frequented my bird-bath during February 1982, usually coming during the heat of the afternoon, but on two occasions as late as 18.00 and 18.40 hrs.

My house is on Ngede Road, close to Karen in Nairobi, and the bird-bath is on the edge of a patch of forest that runs through towards Marula Lane. The Sparrowhawk appeared to have been feeling the heat and would squat in the water for up to 20 minutes undeterred by noises off or people moving about on the varandah only 30 metres away. I never managed to see him arrive, but he always flew off straight back into the forest.

He was most beautifully marked : pure white underparts very finely barred dark grey; cheeks grey, top of head and back very dark grey; wings dark grey with black - or almost black - primaries; long tail broadly barred grey and black above and grey and white underneath with white tips; eyes bright yellow and legs straw coloured.

On one occasion I was lucky enough to witness a fascinating drama. "Narcissus", as I called the bird, was standing on the rim of the bird bath (approximately four feet high) with, for once, his back to me, gazing either at his reflection on the water or into the forest. Suddenly he swooped to the ground, unfortunately out of sight behind a rockery, returning to his perch a few seconds later. Twice he did this, still back to me and facing the forest, then took up a menacing attitude with shoulders hunched and wings outspread like a heraldic bird. A few seconds later he shot up into the low overhanging branch. Onto the bird-bath jumped a Black-tipped Mongoose who proceeded to strut around the rim flicking the tip of his tail and gazing around with an expression of "I'm king of the castle now" on his face. When he left, Narcissus, too, returned to the forest - perhaps disgusted. But he was back the next day.

When the rains start it is hoped to be able to find out if there are a pair of these sparrowhawks around and if they will breed in the forest.

Note I have referred throughout to Narcissus as 'he' for ease, but I rather suspect 'him' to be a female because of 'his' large size.

Mrs D.M. Sheppard, P.O. Box 24630, KAREN, Nairobi

BIRDS AS SNAKE DETECTORS

On 25th April 1982 while walking in that part of our Karen garden which has been left as bush and to which the dogs are excluded, I noticed a small group of birds dancing up and down near the ground and behaving in a way I have never seen before. Three of them were Grey-backed Cameropteras and one a Ruppell's Robin Chat, I am not sure of the others. Very slowly I walked towards them and about a metre away two of the Cameropteras came and flew against my legs several times so that I could feel the impact of their little bodies through my trousers. I stopped, very puzzled by their actions and then saw, right in front of me, a Puff Adder with head poised ready to strike and totally still. I measured him and he was 36 inches long and suprisingly heavy.

Could anyone please give me a logical explanation as to the behaviour of these birds ? They seemed to want to prevent me stepping on the snake and they succeeded, but why ? Did they know I would kill the snake for them ?

Anna Merz, P.O. Box 24897, KAREN, Nairobi

CHAIRMAN'S REPORT FOR 1981

At the 72nd Annual General Meeting of the Society held on 8th March 1982, the Chairman opened his report by welcoming all members present. Progress had been made in all matters mentioned in the last report and comments on them would follow.

Having raised sufficient funds through donations and advance sales to pay for its publication, the Ornithological Sub-Committee handed over to the Society, for it to market, approximately 3,300 copies of the Birds of East Africa. The book having been paid for, most of the monies received from its sales would be profit, and it had been decided that 75% of this would be ear-marked for ornithological research and publications. The Check List of the Birds of Kenya, an off-shoot of the major publication, had also been published during the year. The office bearers and members of the Sub-Committee deserved special praise for their efforts, especially as Scopus and the Annual Bird Report had also continued to appear regularly.

As anticipated, but somewhat later than expected, the various departments of the Division of Natural Sciences in the Museum had moved out of their various buildings into their new accomodation. As far as the Society was concerned, this move had two major consequences.

The Museum kindly gave the Society, almost half of the accomodation previously occupied by the Department of Entomology on the first floor of the main Museum building. Denise and Eileen Angwin carried the major burden of making the move into this new large area. With all this additional space, it was now possible for more helpers to assist in assembling the mailing the Bulletin and members were requested to volunteer for this task under a co-ordinator. One or two volunteers were also required to help in packing and despatching books, orders for which had increased considerably in recent months. (Miss Priscilla Allen kindly offered to act as co-ordinator.)

With the vacating of the old Society's offices and the adjacent workshops downstairs, space had become available to enlarge the joint Library, an objective that had been desired for many years. The funds for this expensive project had been made available through the kind generosity of the Canadian High Commission in Kenya, with whom a grant of Canadian $ 25,000 (Shs 216,485.00) had been negotiated. The Society was most grateful to the Commission for its help and co-operation.

Members were reminded that in 1939, when the Society handed over its Museum to the then Kenya Government, an agreement was drawn up which made it clear that the Society's valuable and extensive Library was excluded from the handover and remained the seperate property of the Society. The Coryndon Memorial Museum (now the National Museum) was permitted to have the full use of the Library and its contents, in return for which, it would look after and maintain the Library, allow full access to the members of the Society to the Museum, its Study Rooms and Laboratories, and the Library. A close liason had existed ever since between the Society and the Museum. The Library had become the Joint Library and the recent generous accomodation provided by the Museum was a further indication of the happy co-operation between the two organizations.

On the subject of donations, the Chairman informed the members that World Wildlife Fund Kenya had given the Society Shs 60,000.00 towards their 'bird migration survey' project.

After many years of work as the Hon. Librarian, Vice-Chairman Prof. John Kokwaro had asked to be relieved of this duty, and he was thanked by the Chairman.

Denise Angwin and Mrs Eileen Angwin had tackled with devotion and enthusiasm the many jobs that fell to them as Joint Hon. Secretary/Treasurer. In addition they also organized the programme of functions during Lisa Campbell's prolonged absence from the country. Lise was now back to take over the programme.

After many years of devoted work as the Editor of the Society's Journal, Jean Hayes had decided to relinquish this task and the Society's sincere thanks were due to her for the hard work she had put in over the years. Joint Editor Mike Gilbert was leaving the country later in the year and the Society was sorry to see him go. Both he and his wife would be missed for their help in many areas.

The Brittons had left Kenya during 1981 and the important Nest Record Scheme had been taken over by Barry Taylor. Graeme Backhurst continued as Bird Ringing Organizer and Fleur Ng'weno still lead regularly the popular Wednesday morning bird walks.

From the above it would be clear that members of the Executive Committee (both elected and co-opted) continued to work with devotion and dedication for the good of the Society and the Chairman expressed his and the Society's appreciation.

Membership continued to be satisfactory. It dropped from the record figure of 836 for 1980 to 830. Not serious, but the drop emphasized the necessity of continuous vigilence and effort to enrol new members because of the high wastage every year.

The meeting was requested to renew the mandate given last year to increase the annual subscription to Shs 100.00 if necessary. No increase was being made for 1982 but in view of the dramatic increase in postal rates, it could be necessary to do so in 1983. This would not be done, however, unless absolutely necessary. (The mandate was renewed by the meeting).

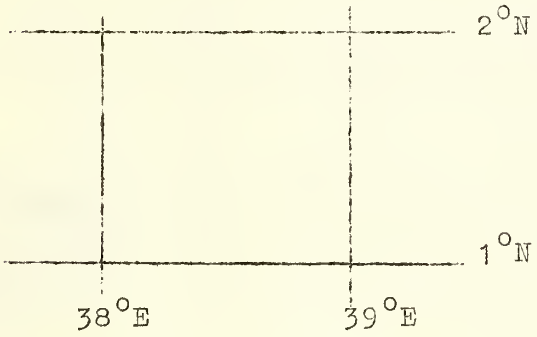
In conclusion, the Chairman thanked all the elected and co-opted members of the Executive Committee for their ready and willing help, without which his job as Chairman would have been impossible.

A BIRD ATLAS FOR KENYA

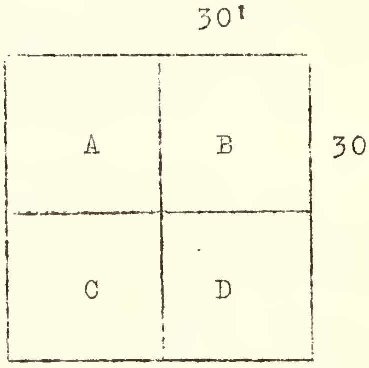
Over the last 30 years has come the realisation that it is useful to map bird distribution by means of geographical grid squares. Use of this method was at first limited, but now many countries have such schemes in operation and, in Africa, The Gambia (10,368 km^2), Natal (91,385 km^2) and Tunisia.(164,108 km^2) have already published such 'bird atlasses'. But with an area of 582,646 km^2 and an avifauna of over 1,050 species, the bird atlas for Kenya is by far the most ambitious undertaking so far.

This article relates the methods by which we are compiling information for this Kenya atlas, which is already well under way, and explains exactly how anyone with even a slight knowledge of birds can make a very material contribution.

The grid The basis of the study is the grid of squares produced by the intersections of the lines of latitude and longitude. Hence each unit of 1° latitude by 1° longitude in area is called a "one degree square", and each of these is subdivided into 4 "quarter degree squares". For example :



a) example of one degree square



b) lettered quarter square degrees within one degree square shown on left

Each of the one degree squares has a code number by which it can be identified so that, taking a local example, Mt Suswa is in 75A, Nairobi in 75B, Magadi in 75C and Kajiado in 75D. Then again Nakuru 62A, Nyeri 62B, Naivasha 62C and Kijabe 62B; and so on. The key to these code numbers can be found in Scopus (5 (1(, 1981) or can be obtained from ADL.

The choice of grid square size was discussed at the 5th Pan African Ornithological Congress in Malawi in 1980, where it was recommended that all atlassing schemes in Africa should use a quarter square degree unit (or a subdivision of it, such as a sixteenth, as used in Natal). European atlasses generally use 10 km squares (i.e. 100 km^2), but the Atlas of Breeding Birds in Britain and Ireland (Sharrock 1976), for example, considered only 299 species in 315,000 km^2, with the aid of up to 15,000 observers. In Kenya, we are studying well over 4 times that number of species in nearly twice that area, with at most 2% of their observer force - even if we could cover one 10 km^2 per day, every day, we'd still be at it for the next 17 years ! Secondly, while a coarser grid will include greater variations of habitat and altitude and thus greater mixtures of the elements of diverse bird communities, this effect will only be completely remedied by drastic and totally impractical (on a national scale) reduction of square size.

The method The method is simple. We compile a list of bird species observed since 1970 in each of the quarter square degrees, and also indicate those species which are known to have bred since that year, or to probably have done so. We now have substantial data for 138 of the 205 squares within Kenya (excluding minor border areas), and a total of over 23,000 observations on our files; we aim to complete data collection by late 1983.

At the start of July this year, these data will be used to produce a complete set of maps, over 1050 of them, so that the distribution of each bird species can be compared by means of transparent map overlays with such parameters as altitude, temperature, moisture index, presence of indigenous forest, presence of large areas of standing water etc. The maps will also indicate the distributions and areas of overlap of allopatric members of subspecies (i.e. those closely related species that occupy mutually exclusive, or almost so, ranges).

Trial maps are already indicating the viability of the scheme. Fig 1 shows the distribution of the Augur Buzzard, Buteo augur, a common and well known resident species. The altitude overlap shows its restriction to upland Kenya, including Mts Kulal (26B) and Marsabit (27D 28C), though extending down to near sea level in the Mariakani and Shimba Hills areas; breeding has only been recorded at higher altitudes, mainly above 1,000 m.

Fig 2 on the other hand shows the Eurasian Swallow, Hirundo rustica, which is a common migrant to Africa from the Palaearctic winter; as would be expected, this migratory and highly aerial insectivore occurs all over Kenya during its travels. The higher density of records in the southern half of the country reflects the distribution of observers. And, of course, since it breeds in Eurasia, there are no breeding records.

Fig 3 illustrates the preference of the White-bellied Tit, Parus albiventris, for the damper highlands, rather like the Augur Buzzard (Fig 1), while the Grey Tit, P. afer, is a bird of the drier north and east of the country. Note the few areas of overlap of these two species, even on this coarse grid, around the edges of the highlands (square 26A contains Mr Kulal).

The benefits of the scheme There are several solid advantages to the scheme :-

1) since the scheme requires as full as possible a species list from any locality, it forces you to take note of even the most common and obvious species - the Common Bulbul Pycnonotus barbatus, Red-eyed Dove Streptopelia semitorquata and even the Feral Pigeon Columba livia - and thus (a) see birds that would ordinarily be ignored (e.g. the first record of the Compact Weaver Ploceus superciliosus from South Nyanza recently), and (b) find that species at first taken to be the common and well known ones aren't (e.g. the many birds of western Kenya that are subtly but surely of different species to those so familiar to us here in Nairobi).

2) the atlas progress map (see below) highlights the areas of Kenya that are/have been under-observed ornithologically, and thus shows where original contributions/exciting finds are most likely to be made.

3) the atlas will collate, if only in a rather basic fashion, much of the huge bulk of distributional data for Kenya that we have all accumulated in our bird notebooks and checklists, and which for the most part lie unused except for our own personal satisfaction.

4) the scheme will illustrate the distributions given in Birds of East Africa (Britton 1980) and will thus complement that book, as well as updating and correcting it in some cases.

5) inclusion of pre-1970 data can illustrate in a very graphic way the effects of habitat changes on bird distribution, e.g. in the Ostrich Struthio camelus, thus providing useful evidence for conservation research.

Figure 1. Distribution of Augur Buzzard in Kenya

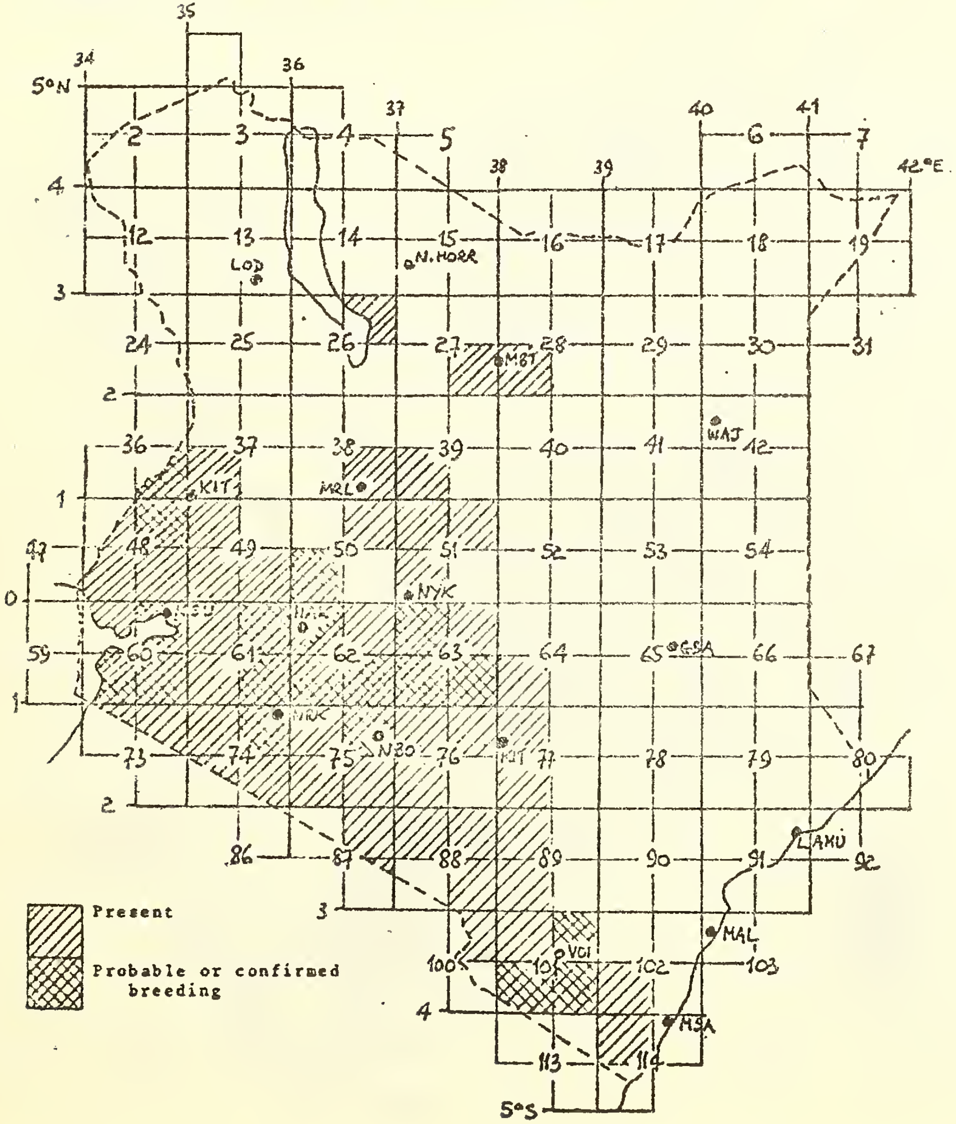

5°N
5°S
34
35
36
37
38
39
40
41
42°E
LOD
N.HORR
MBT
WAJ
KIT
MRL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
LAMU
MAL
VOI
MSA
Present
Probable or confirmed breeding

Figure 2. Distribution of the Eurasian Swallow in Kenya.

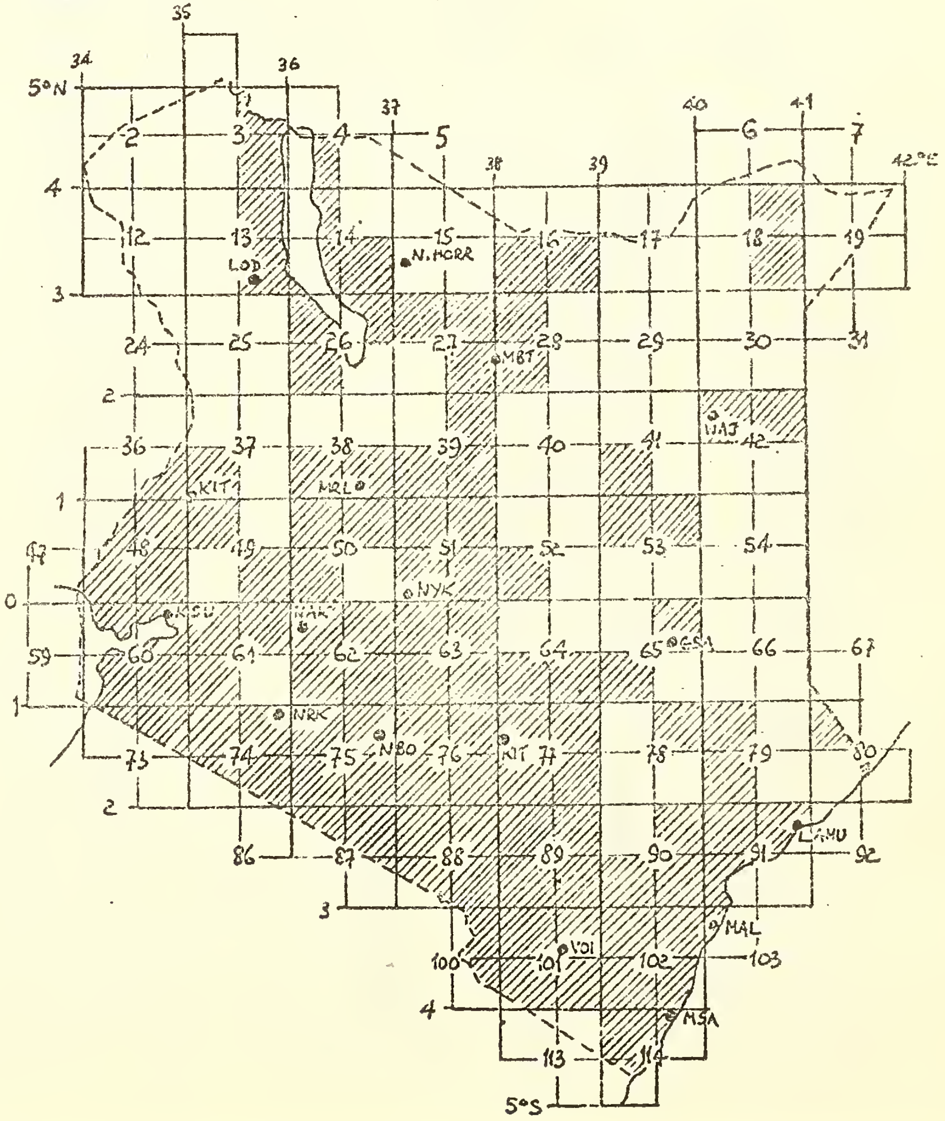

5°N
5°S
34
35
36
37
38
39
40
41
42°E
LOD
N.HORR
MBT
WAJ
KIT
MRL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
LAMU
MAL
VOI
MSA

Figure 3. Distributions of the White-bellied and Grey Tits in Kenya.

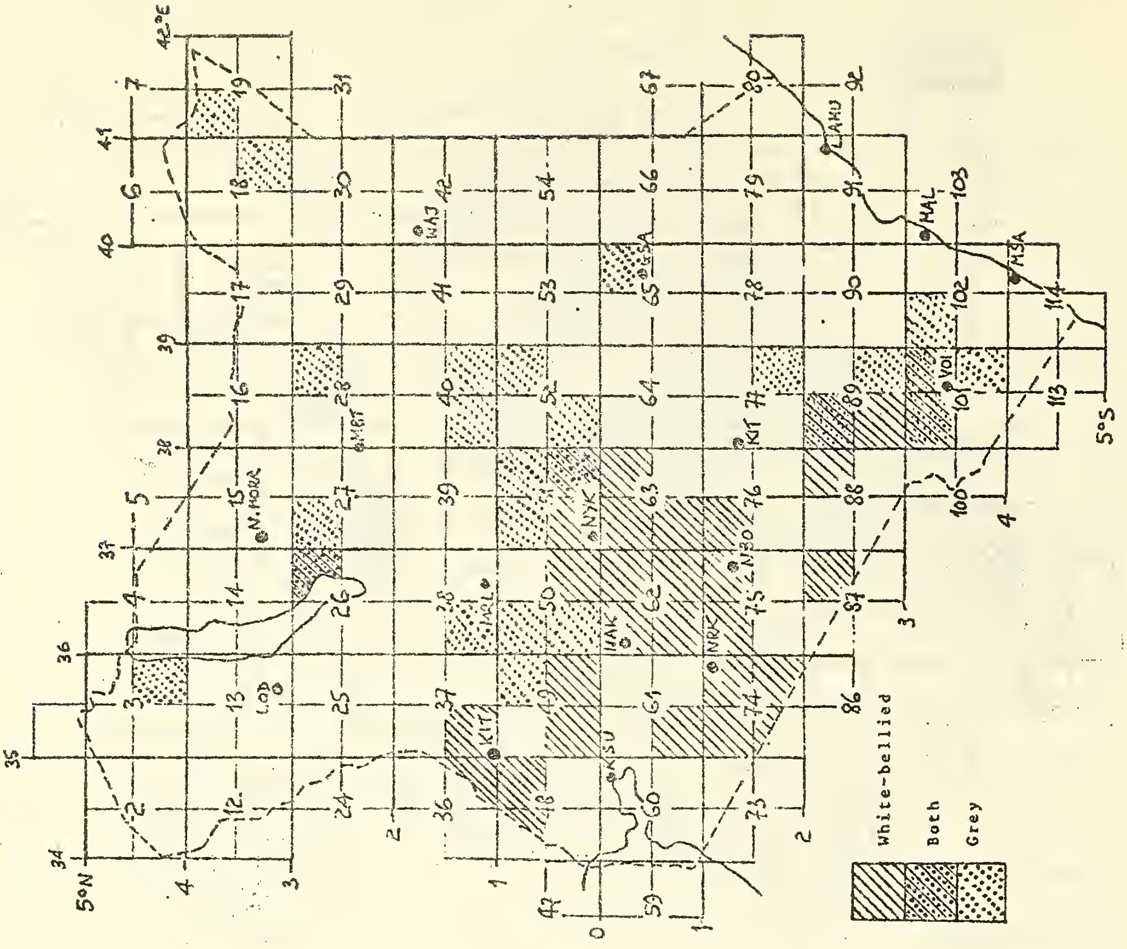
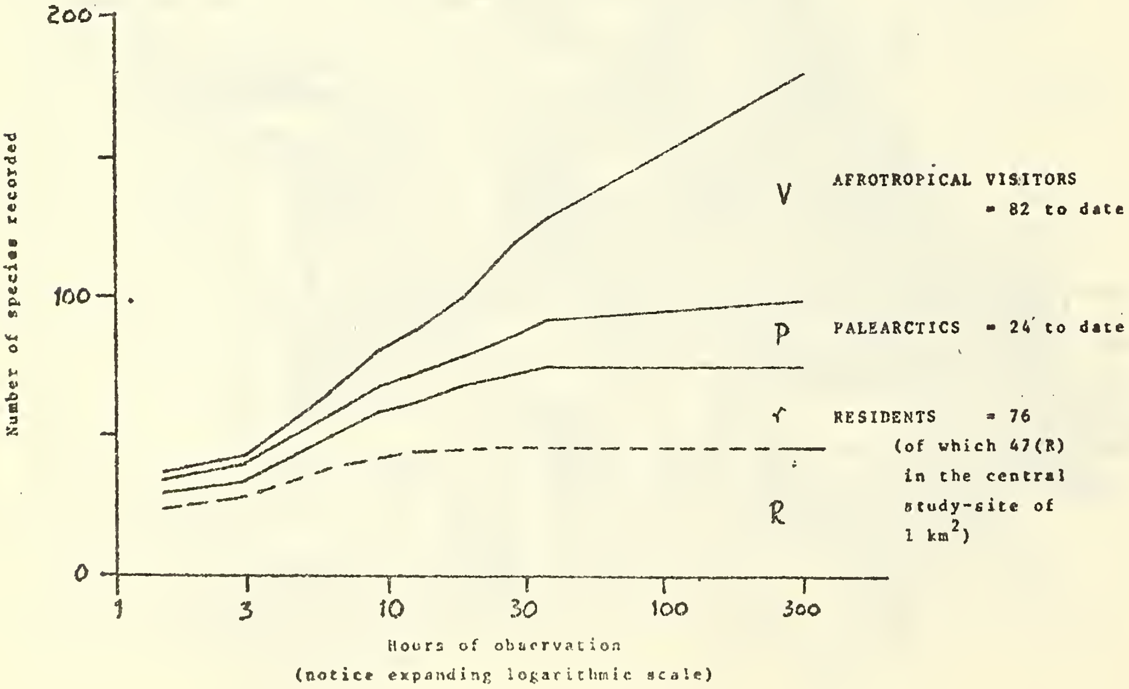

42°E
5°N
5°S
N.HORR
LOD
MBT
WAJ
GSA
IRL
NYK
NAK
KSU
KIT
NBO
NRK
LAMU
MAL
VOI
MSA
White-bellied
Both
Grey

Figure 4. The number of land-bird species recorded at Bushwhackers Camp, Masalani. Even after 300 hours of observations, additions were still being made to the lists of Afrotropical and Palearctic visitors.



6) this study is being run on the lines recommended for mapping schemes in the Afrotropical region (Ash & Pomeroy 1981), so that its results can be incorporated into a possible Pan-African ornithological atlas at some time in the future.
7) the maps will provide a very rapid and comprehensive first step in the assessment of bird records submitted for future East African Bird Reports (published annually by the EANHS in Nairobi), by giving a readily visible summary to known range and breeding areas.
8) this record of current distribution will prove increasingly valuable in the future, as habitat change proceedes apace.

WHAT CAN YOU DO FOR US Although some of the above may appear a little complicated, my prose at times perhaps attaining a little less than lucidity, the practical methods of data collecting are very simple :-

A Basic method When visiting any locality, simply make as complete as possible a list of the birds you see/hear, and indicate which of them are probably or definitely breeding (see below). Forward the list to ADL (Geology, P.O. Box 30197, Nairobi): ALL correspondence will be answered and acknowledged.

Criteria of definite or confirmed breeding are : sight of eggs and/or very young young and/or persistant carrying of food to nest and/or distraction displays or injury feining. Eggs of parasitic species in a nest constitute confirmed breeding for both the parasite and the host.

Criteria of probable breeding are :- nest building or excavating of nest hole; agitated behaviour or anxiety calls from adults; adults visiting probable nest sites, courtship and display; permanant territory presumed through noting the territorial behaviour (song etc.) on several occasions during breeding season.

B Other important points
1) the precise location of the area being covered is CRUCIAL. Alternatively to individual localities, you can submit data for quarter square degrees.
2) ABSOLUTELY NO details of dates OR numbers of birds are required.
3) previously compiled lists back to 1970 are very welcome.
4) you do NOT need to be familiar with all Kenyan birds, but you are expected to identify accurately all those that you record. WHEN IN DOUBT - OMIT. In any case, all unusual records will be subjected to the same scrutiny as those submitted to the Scopus Annual Bird Report: in other words, full descriptions made in the field, are required, preferably confirmed by a second observer.
5) a good map from which to derive localities and/or quarter square degrees is the "Kenya and Northern Tanzania Route Map" (published by the Survey of Kenya; SK 81; Shs 20/- or thereabouts; e.g. Prestige Bookshop, Mama Ngina St., Nairobi).
6) as applies throughout birdwatching, visits to as many different types of habitat as possible within a quarter square degree will substantially boost your checklist.

WHAT WE WILL DO FOR YOU
1) all correspondence will be answered; please do not hesitate to ask questions if anything is unclear.
2) all contributors will be listed and acknowledged when the altas is published.

) the merest hint of a request to ADL will furnish, gratis, (a) a copy of the current atlas map, showing the exact number of species recorded for each quarter square degree in Kenya to date; and (b) one or more checklists on which to list and send in atlas data -YOU'VE NEVER HAD IT SO GOOD !

Coverage of squares Scrutiny of the above-mentioned progress map may lead to the impression that some areas of Kenya are sufficiently covered to render any further contrubutions superfluous, but this is *certainly not the case*. *ONLY* for the Nairobi area (square 75B), with its species list of over 500, are *breeding records only* required.

The reason for persisting in apparently already well documented areas is that birds in Kenya, particularly in the drier areas, tend to move around a lot, so that there is always the chance of finding something new. Thus Sharrock (1976) quotes 50% of the breeding species in a UK square being found in over 2 hours of observation in the square, rising to 87% in over 16 hours, but not reaching 100% even after *200* hours.

Fig 4, based on DEP's observations at Bushwhacker's Camp, Kibwezi, shows this effect in more detail. Numbers of all types of species recorded rise steeply during the first few hours of observation, after which the totals for the resident species flatten out, as they've all been seen. But the important point is that the total of *wandering or vagrant* species continues to rise even after *more than 300 hours* of observation, which may be the short cut to myopia - BUT ANY LIST IS THUS USEFUL.

Tanzania Don Turner is running a similar scheme for Tanzania, and all relevant data should be sent to him at P.O. Box 48019, Nairobi.

Last thoughts Only two, both miserably plagiarised from some excellent blurb on the *Atlas of Australian Birds* (Royal Australasian Ornithologists' Union) :-

1) "It cannot be overstressed that accurate observation and recording are essential. *If you are not absolutely certain of your identification, do not record it.*"

2) "Above all, *enjoy it*."

REFERENCES

Ash, J.S. & Pomeroy, D.E. 1981. Mapping schemes in the Afrotropical region. *Scopus 5*: 36-38.

Britton, P.L. (ed.) 1980. *Birds of East Africa*, Nairobi: EANHS

Sharrock, J.T.R. 1976 *The Atlas of Breeding Birds in Britain and Ireland*. London: T & A.D. Poyser.

Adrian D. Lewis, Geology, P.O. Box 30197, NAIROBI

&

Derek E. Pomeroy, Zoology, P.O. Box 43844, NAIROBI

THE C.J.P. IONIDES MEMORIAL FUND

The C.J.P. Ionides Memorial Fund was launched in 1973 in order to erect a memorial in Nairobi to the late C.J.P. Ionides, the well known herpetologist and naturalist. Contributions were received from many parts of the world and it was hoped to use this money to build an Ionides Memorial Cage in the Nairobi Snake Park. This has not proved possible, mainly because of uncertainty over plans to modernise the Snake Park, and therefore, an alternative form of memorial has been devised.

The first step in the new plan will be to erect a plaque in the gardens at the front of the Snake Park. These gardens were originally designed as a memorial to Ionides and it would seem appropriate to provide a public record of the fact.

A second and more ambitious plan is the establishment of an Ionides Memorial Library, to be housed within the National Museum. The Library will consist primarily of books and papers on reptiles and amphibians. It is intended that this should be available to Kenyans and others who are working in the field of herpetology.

The organizers would like to thank all those who contributed to this Fund. In addition, they wish to publicise the Ionides Memorial Library and to encourage authors and publishers to contribute relevant works to it. Further information is available from J.E. Cooper, Royal College of Surgeons of England, London WC2A 3PN, or R.E. Leakey, National Museums of Kenya, P.O. Box 40658, Nairobi.

FOR SALE

1) One good warm sleeping bag
Two safari blankets
One Lilo
One safari mosquito net.
Shs 500/- for the lot. Please contact Priscilla Allen, telephone 745740, P.O. Box 14166, Nairobi

2) MAPS Kindly donated to the Society for re-sale by Prof. Robins :-

One complete set covering Kenya, scale 1/250,000	Shs 400/-
Single maps of Tanzania, scale 1/1m	Shs 10/- each
Single maps of Kenya, scale 1/50,000	Shs 10/- each
" " " " scale 1/100,000	Shs 10/- each

Can be seen in the Society's office, please contact the Secretary.

3) TOYOTA LAND CRUISER STATION WAGON (green/white) 4 wheel drive, 3 low gears, good condition (tested on many of the EANHS excursions etc) with roof rack and camping equipt (if desired). Price Shs 65,000/- negotiable. Please contact Mr R. Egli, Kyuna Estate, telephone 582855.

4) Mike and Caroline Gilbert still have for sale :
Subaru 4 wheel drive estate, 1978 Shs 78,000/-
All camping equipment, binoculars, books, furniture, fridge, cooler etc. Also, free to a good home Suzy, a fetching (spayed) labradore type, and Peterkin, a 5½ kilo personable (neutered) cat. Please contact the Gilberts on telephone 48571, or see Mike in the Herbarium at the National Museum.

WANTED

A used copy of The Birds of Britain and Europe by Heiman Heinzer, Richard Fitter and John Parslow. Please contact Rhodia Mann, telephone 61792, or write P.O. Box 14508, Nairobi.

Books for Sale at Members Discount Rates :

Williams and Arlott, A Field Guide to the Birds of East Africa now only Shs 155/-

Carcasson, Collins Handguide to the Butterflies of Africa, an excellent book, Shs 90/-

R.O. Williams, Useful and Ornamental Plants of Zanzibar and Pemba Shs 80/-

Also Remember we hold stocks of :

Birds of East Africa, Britton ,P.L. (ed.) Shs 130/-

The Breeding Seasons of East African Birds, Brown & Britton, Shs 80/-

A Check List of the Birds of Kenya Shs 10/-

Out of Print Africana Books :

Martin Johnson, LION, African adventure with the king of beasts. 1929, New York, 1st Ed. Very good condition. Shs 200/-

Martin Johnson, OVER AFRICAN JUNGLES. 1935, New York, 1st Ed. Very good condition. Shs 100/-

Maurice Maeterlinck, THE LIFE OF THE WHITE ANT, 1930 U.S.A. Good condition. Shs 80/-

Emily Ruete, MEMOIRS OF AN ARABIAN PRINCESS, translated by Lionel Strachey. 1907, U.S.A. 1st Ed. Good condition Shs 400/-

Dr Karl Weule, NATIVE LIFE IN EAST AFRICA, the results of an Ethnological research Expedition. 1909, London 1st Ed. Beautiful red leather binding, excellent condition. Shs 1000/-

Felice Benuzzi, NO PICNIC ON MT KENYA. 1953, 1st U.S.A. Ed. Excellent condition with dust wrappers. Shs 130/-

Isak Dinesen (Karen Blixen) WINTERS TALES 1942, excellent condition with dust wrappers. Shs 70/-

J.B. Carson, SUN, SAND AND SAFARI, some leaves from a Kenya notebook. 1957, London. Good condition. Shs 90/-

John Boyes, THE COMPANY OF ADVENTURERS, 1928, London 1st Ed. Slight foxing, but otherwise good. Shs 400/-

Alys Reece, TO MY WIFE 50 CAMELS, 1963, London, 1st Ed. Shs 150/-

Sir Michael Blundell, SO ROUGH A WIND, the Kenya memoirs of Sir Michael Blundell, 1964, London. 1st Ed. Excellent condition with dust wrappers. Shs 200/-

Sir Geoffrey Archer, PERSONAL AND HISTORICAL MEMOIRS OF AN EAST AFRICAN ADMINISTRATOR, 1963 London, 1st Ed. Excellent condition with dust wrappers. Shs 220/-

Thanks are due to Lise and Tim Campbell for their help in many areas over the last few weeks. Tim, among other things, has put up two soft board sheets in the new office, re-designed and mounted the very old photographs of the Museum, and made a new notice for the office door. Lise has been of great help with collating the Bulletin and wrapping some of the large numbers of book orders.

Bulletin Copy Many members have sent in their observations on various natural history subjects, and we still have plenty of material in hand. However, PLEASE, PLEASE keep it coming in so that we can give you as varied a Bulletin as possible.

Journal Part included in this issue of the Bulletin to all but Junior members :

> Backhurst, G.C. East African Bird Ringing Report. Journal No. 174.

Informal Notes Sets of 12 cards, with envelopes, 6 different designs, are available to members from the office at just Shs 10/- per set.

Car Stickers An attractive design showing the Society's Long-crested Eagle, for Shs 2/- each.

Lectures - Polite Notice Members attending the Society's lectures are kindly asked to try and arrive on time for the 5.30 p.m. start, and also are asked to please not talk during the lecture or slide show. Not only is this very distracting to other members, but is rather impolite to the speaker.

Office Closed With regret for any inconvenience to members, the Secretarys will be away from Tuesday 4th to Tuesday 11th May. Any messages can be left under the door of the office, or with the Librarian in the Joint Library.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

James Ashe, P.O. WATAMU, via Malindi, Kenya
Susan Barduhn, P.O. Box 14662, NAIROBI
Rebecca Cardozo, P.O. Box 14662, NAIROBI
Abdul Waheed Cockar, P.O. Box 47612, NAIROBI
Njoroge G. Kiarie, University of Nairobi, Hall 10, P.O. Box 30344, NAIROBI
S.M. Martin, P.O. Box 19161, NAIROBI
Jean-Francois Medard, Maison de France, C.R.E.D.U., P.O.Box 49415, NAIROBI
Dr Wolfgang Pandikow, University of Nairobi, Institute of Computer Science, P.O. Box 30197, NAIROBI
L.A. Ros, Kiserian Mission, P.O. Box 15533, MBAGATHI, Nairobi
Miss Jenny Shepherd, P.O. Box 30564, NAIROBI

Local Junior Member

S.M. Muchiri, University of Nairobi, Zoology Department, P.O. Box 30197, NAIROBI

Change of Status to Life Membership

The Marchese Sieuwke Bisleti van der Laan. P.O. Box 185, NAIVASHA, Kenya
Dr Nigel Nicholson, P.O. Box 259, MBEYA, Tanzania
Miss Chieko Umetsu, 6-18 Shinmei Cho, TSURUOKA-SHI, 997, JAPAN

Overseas Full Members

T.C.E. Congdon, P.O. Box 40, MUFINDI, Tanzania
R.J. Douthwaite, c/o British Embassy, P.O. Box 1036, MOGASISHU, Somalia

SOCIETY FUNCTIONS

Monday 10th May 1982 in the Museum Hall, Nairobi at 5.30 p.m. Mr M.E.J. Gore of the British High Commission will give an illustrated lecture on "Birds across the Continent - a comparison of the birds of Gambia and Kenya".

Sunday 23rd May 1982 Mike Clifton of the Entomology Department of the National Museum has kindly agreed to lead another of his popular "Dudu Crawls". Please meet at the National Museum at 9.30 a.m. and bring a picnic lunch if you wish to stay all day.

Monday 14th June 1982 in the Museum Hall, Nairobi at 5.30 p.m. Mr Peter Davey will give an illustrated lecture on "Turkana and its Birds".

(Friday) Saturday/Sunday, 25th,26th,27th June 1982 WEEKEND SPECIAL for 2 or more nights at Amboseli Lodge. Adults Shs 250/- per person per night full board. Children under 12 sharing parents' room Shs 125/- each per night full board. If you wish to take advantage of this offer to spend a couple of days in the well known lovely setting at Amboseli at the foot of Kilimanjiro, please fill in the enclosed form and return it with full payment by crossed cheque made out to Kilimanjiro Safari Club to Mrs A.L. Campbell, P.O. Box 14469, Nairobi as soon as possible, receipt, vouchers and further information will be sent at the beginning of June. Please enclose a self addressed reply paid envelope.

Weekend of 10th-11th July 1982 Camping weekend by kind invitation of Mr F. Davey. This will be on private land on the edge of the Athi River surrounded by forest. Distance from Nairobi about 70 km. Main interests will be bird watching and botany, but there is a chance of seeing a few larger mammals. Members wishing to join this field trip should please fill in the enclosed form and return it to Mrs A.L. Campbell, P.O. Box 14469, Nairobi. Please enclose a self addressed reply paid envelope.

Monday 12th July 1982 in the Museum Hall, Nairobi at 5.30 p.m. Film - details to be announced later.

Monday 9th August 1982 in the Museum Hall, Nairobi at 5.30 p.m. Mr Stephen Njuguna will give an illustrated lecture on "The Ecology of the Naivasha Lakes".

Weekend of 27th-29th August 1982 Accommodation in bandas or camping at Fisherman's Camp, Lake Naivasha. Details later.

23rd - 27th October 1982 Walking tour in Tsavo by the Tsavo River about 10 miles a day. The Society has been offered the following special rates for this interesting river walk : Shs 2,000/- per person inclusive of all transport from Nairobi, food, park and camp fees and guide. Accommodation in tents at special camp sites. Only personal equipment and sleeping bags should be brought. We need 12 people to make this rate applicable. Anyone interested, please write to Mrs Campbell, P.O. Box 14469, Nairobi as soon as possible to give an indication as to whether the above provisional booking can be confirmed.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., M.E.J. Gore, Miss S. Karmali
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Mrs. C. Taylor
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Mrs. J. Hayes, Dr. A.D. Lewis, D.A. Turner
Co-opted Members: P.B. Taylor (Nest Record Scheme Organizer), Mrs. F. Ng'weno, S. Njuguna, Dr. D. Pearson, D.K. Richards, Mrs. P. Wootton, P. Davey
Journal Editorial Sub-Committee : M.E.J. Gore, Miss Karmali
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, D.K. Richards, T. Stevenson, P.B. Taylor, Dr. K. Howell, J. Beesley, N. Baker, (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds, P.L. Britton (United Kingdom)
Joint Library Sub-Committee : (Society representatives) Mrs. C. Taylor, M.P. Clifton.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
NH

EANHS

BULLETIN

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN JULY/AUGUST 1982

CONTENTS

Scavenging and Altruism Associated with Calving Wildebeest 76
Another Aberdare Caracal 77
Mt Kenya - Notes on Two Recent Visits 77
General Report on Lake Turkana - 24th April - 6th May .. 78
For the Interested Birdwatcher 79
An Avian Mimic 81
Nylon - and its Insidious Danger to Birds 83
Recipe for Easy Birdwatching 83
The Bird Atlas for Kenya: a Request for Information on Place Names 84
Easter Week End Camp at Maralal 84

Book Reviews :

Rifts and Volcanoes 86
A Notebook for Kenyan Dyers 87
Notice to Anyone Interested in Birds 88
The Champion Fund 88
Wanted 89
For Sale 89
House Warming/Exchange 89
Accommodation Required 89
Society Notes 89
New Members 91
Society Functions 92

SCAVENGERS AND ALTRUISM ASSOCIATED WITH CALVING WILDEBEEST

Whilst collecting samples during this year's wildebeest calving season I was able to watch two things which may be of general interest. Much of my time was spent following recently calved wildebeest and waiting for them to expel their placenta, which usually occurred a few hours after the actual birth. Once the placenta had fallen out it was usually a simple matter to examine and sample it and then retire about 200 metres away in order to time its disposal by scavengers.

Despite initial expectations to the contrary, I only saw one carnivore, a Silver-backed Jackal eating one out of more than 50 placentae, though it is probable that various carnivores accounted for the few placentae which survived the day only to have vanished by the following morning. The majority of placentae were rapidly detected and devoured by scavenging birds, usually within half an hour of expulsion. First to arrive was virtually always Tawny or Steppe Eagles, Aquila rapax and A. nipalensis, whose presence then attracted African White-backed Vultures, Gyps africanus, Ruppell's, G. ruppellii, and Lappet-Faced Vultures, Torgos tracheliotus and Marabou Storks, Leptopilos crumeniferus. A White-headed Vulture, Trigonoceps occipitalis was seen at a placenta only once, immature Bateleurs, Traphopius ecaudatus were seen leaving the party early on two occasions and an immature Martial Eagle, Polemaetus bellicosus, circled nearby on one other occasion. It was soon obvious that these birds, particularly the eagles, were quartering the main calving grounds actively searching for placentae and on two occasions they even appeared to anticipate unexpelled placentae which were hanging visibly from wildebeest. This salubrious behaviour was often so swift that my motorized dash to freshly-dropped placentae was beaten twice. After watching and waiting for five midday hours in the middle of the Loita plains there are few feelings more galling than being upstaged by superior scavengers. Eventually, however, the situation was turned to my advantage and I collected a further eight samples, which I had not seen drop, from sites where scavengers were rapidly landing. This feeding behaviour, which occured on the Kiloriti, Loita and Kapiti plains and in Amboseli National Park, Kenya, is perhaps not surprising considering that on the Loita plains alone an estimated minimum of 5,000 wildebeest dams should have dropped 7½ metric tons of tender meat in convenient 1.5 kilogram packs !

On a differnnt note, I have read that zebras will show active concern for weaker and threatened members of their group and witnessed this near Aitong one evening when a cohort of six zebras dramatically rushed in to surround a lone, lame zebra which we had inadvertently startled towards a hungry lioness. The lioness charged but gave up after 200 metres or so having had trouble singling out the lame animal in the ensuing stampede.

More interestingly, perhaps, whilst working near Ngorengore onthe Loita plains some zebras appeared to show similar concern for a member of another species, a wildebeest calf. Early each morning a Maasai living behind the hill on which we were camped encouraged their dogs to chase the wildlife away from their immediate grazing and waterhole (in fact the dogs accounted for several wildebeest calves, something which we did not see any hyaenas doing). One morning a herd of 15 to 20 zebras, harried by a dog, cantered swiftly into view around the side of the hill, surrounding in their midst a galloping wildebeest calf which must have become seperated from its mother in another herd which we saw running off in a different direction. The zebras ran below our camp appearing to head directly for a much larger wildebeest herd some 400 metres away. Within 50 metres of this herd the zebras wheeled to gaze at their pursuers from a typical arc formation, the bawling wildebeest calf meanwhile reaching the sanctuary of its own species. It all happened swiftly at a time of day when my powers of observation were still in first gear, and is admittedly open to interpretation. Probably the isolated calf mixed with the zebras because they were a species it already recognized or knew by instinct as unlikely to harm it. Perhaps the zebras ran to the second wildebeest herd by chance, there were many around; maybe they turned on the dog because they had seen it start to lose serious interest in the chase - but to me it seemed that the zebras had shown a degree of concern for the safely of the calf.

Paul B. Rossiter, P.O. Box 32, KIKUYU, Kenya

ANOTHER ABERDARE CARACAL

Referring to your correspondence on Caracals, Felis caracal, I was driving up the main track through the Aberdare salient on 2nd January 1982 when I saw a fawn coloured cat on the track ahead. If it had disappeared immediately I might have thought it a Golden Cat, F. aurata, but a look with binoculars showed it to be definitely a Caracal with a short tail and tufted ears. I made one other unusual sighting of this cat about 20 years ago on the plains above what is now Governor's Camp. A large Caracal was walking across the open plain followed by at least fifty Thomson's Gazelles who seemed far more agitated than they would have been by a cheetah or lion, their attitude lead me to suspect they had never seen this cat and it is the only sighting I have made in the Mara in spite of having driven many hundreds of miles there at night.

And what is the cat, with rounded ears and a long tail, seen eating the crocodile bait at Samburu by a friend of mine ? He described what can only have been a Golden Cat !

While we are about it, I saw two large red duiker in the forest above the Mara escarpment. They looked much bigger than Cephalophus nigrifrons, could they have been Abbot's ? But they seemed uniform chestnut.

Robert Lowis, P.O. Box 49538, NAIROBI

MT KENYA - NOTES ON TWO RECENT VISITS

In February and March 1982 I had the opportunity to visit Mt Kenya National Park for 10 days (2 periods of 4 and 6 days respectively). While up there, I made notes on the most striking plants and mammals, including birds, I saw without the aid of binoculars.

In the forest zone on the Naro Moru and Sirimon tracks, the most conspicuous birds were Hartlaub's Turacos, Tauraco hartlaubi, the Abyssinian Ground Thrush, Turdus piaggiae, and, at night, the Montane Nightjar, Caprimulgus poliocephalus, which kept us awake with its monotonous call. Mammals seen included a few Bushbuck, Tragelaphus scriptus, Olive Baboon, Papio cyanocephalus anubis, Black and White Colobus, Colobus abyssinicus, Zorilla, Ictonyx striatus, a pair of duiker (species unsure) plenty of Sykes Monkeys, Cercopithecus mitis kolbi, a Spotted Hyaena, Crocuta crocuta, heard at night, and obvious signs of Elephant, Loxodonta africana and Buffalo, Syncerus caffer, on the forest track.

In the heath and alpine zones with their bizarre vegetation types, Tree Heaths, Erica arborea, Philippia sp. , tussock grasses, Giant Groundsel, Senecio sp., Lobelia sp. and everlasting flowers, Helichrysum sp. the birds seen included the extremely tame Alpine Chat, Cercomela sordida and Streaky Seed-eaters, Serinus striolatus, one of which was seen eating dried meat hanging in the Rangers Station in the Teliki Valley. The fantastically striking Scarlet-tufted Malachite Sunbird, Nectarinia johnstoni were seen feeding on the Giant Lobelias and a flock of Slender-billed Chestnut-winged Starlings, Onychognathus tenuirostris were observed flying down the Teliki Valley. A solitary White-necked Raven, Corvus albicollis, was seen near Mackinder's Camp and Augur Buzzards, Buteo augur, were heard frequently at altitudes up to 4,500 m. A pair of African Black Duck, Anas sparsa were seen on Hut Tarn.

The most obvious mammals in the upper parts of the Teliki and Mackinder Valleys were the large number of Mt Kenya Rock Hyrax, Procavia johnstoni mackinderi, whose teddy-bear looks were rather spoilt by their enormous canine teeth which made them look like minature Draculas ! Large numbers of rodents scurried everywhere, the most annoying being the African dormice who squabbled all through the nights over our cheddar cheese supplies. The only rodent identified was the Four-striped Grass Mouse, Rhabdomys pumilis diminutus. Fresh Buffalo tracks were seen on the 'vertical bog' and Black Rhino tracks were seen in the Mackinder's Valley, near Shipton's Cave.

Mt. Kenya National Park is a very beautiful area with its fantastic scenery and weird and wonderful flora and fauna. When I return, I hope that there will be less rubbish in the form of chocolate wrappings, tin cans and cigarette packets littering the track as these do rather destroy the beauty of the area.

David Trump. P.O. Box 59036, NAIROBI

GENERAL REPORT ON LAKE TURKANA - 24th APRIL - 6th MAY 1982

There appeared to have been widespread and heavy rain along the eastern shore, from Loiengalani northwards, possibly about mid-April - grass and small plants germinating everywhere, turning the desert into a totally different place. Bird nesting activity was widespread.

Concern must be expressed on the activities of the large numbers of Luo fishermen now present all along the eastern shore (in the area we visited). I am not competent to comment on the effect of increased cropping of fish (substantial), and accept that the lake should be exploited, but the mere presence (and consequent massive disturbance) of people on the islands off shore has had a severe effect on the breeding of many birds that use these small islands in April and May each year.

Kaldera Island, approximately 12 miles north of Loiengalani, and about a mile off shore, which I have visited each year since 1978, had far fewer numbers breeding than in previous years. All the species were there, but have moved to the central and southern end, abandoning the northern end (the only suitable landing place) in favour of the fishermen camped there.

I can only suggest that efforts might be made to exclude man (just how, I do not know !) during the two months of the year that the birds breed there, i.e. April and May. I am aware that this will mess up my own annual visits, but maybe some form of licenced control could be instituted ?

Peter Davey, P.O. Box 15007, NAIROBI

FOR THE INTERESTED BIRDWATCHER

Even within the short time that I have been here, there have been several instances where enthusiastic and active birdwatchers, ringers and/or photographers have visited Kenya for extended periods, perhaps for long vacations or on contract etc., but have never been appraised of the schemes and opportunities that the E.A.N.H.S. provides for their interest, or have only learnt about them disappointingly close to their departure. Concerned about this lack of communication, particularly with new arrivals in Kenya, the Ornithological Sub-Committee of the Society has asked me to write this summary of the opportunities that exist for learning about the birds here, and also making, in several ways, solid contributions to the ornithology of the country.

To gain a basic knowledge of the birds of Kenya, particularly if you're new to African birds in general, it is very useful to have the advice of more experienced observers, and also to have a reasonable selection of books useful for identification.

The lectures, and in particular, the fieldtrips run by the Society are an ideal way of meeting other birdwatchers but, for a solid knowledge of the many birds of the Nairobi area, which will also provide a basic grasp on most of the bird families for the rest of Kenya, I just can't see anything to beat regular attendance on Fleur Ng'weno's Wednesday birdwalk. These meet at approximately 8.45 a.m. every Wednesday of the year, in the main carpark on the right of the sideroad that leads from Museum Hill to the entrance steps of the National Museum. Free transport is provided, and the localities range over farms (sewage and otherwise), gardens, forests and the open country within about 20 miles of Nairobi city centre. Birdwatching is a quiet occupation, ideally done alone or in small groups, and purists may find the number and occasional uproar of the participants on these walks a little, qu'est-ce qu'on dit ?, frightening; but those palpable criticisms can certainly be countered by the inescapable fact that Fleur is a great teacher with a wealth of knowledge at her finger tips, not only of the birds, but also of plants, mammals, insects etc, such that to keep a position just aft of her shoulder is to gain a lot of information. And, of course, the walks are an excellent way to meet more birdwatchers.

Getting on to the books, most of the useful facts are summarised in "Birds of Kenya: a review of useful identification books" which was published in the EANHS Bulletin (pp. 47-50, 1981); copies of this article can be seen and purchased at the EANHS office. Most of the points in this review still apply, but Ray Moore's birdguide to Kenya, which will introduce so many excellent localities to the new arrivals, had regrettably still to appear.

Unlike the twitcher-ridden bird sites of Europe and in particular the U.K., Kenya is a country where, unless you are on a group trip and especially if you're outside a National Park, you are quite unlikely even to meet another birdwatcher 'in the field'. This glorious sense of space is further enhanced by the fact that quite uncomplicated bird observations can often be original or at least useful. For the observer who likes to make some actual contribution to ornithology, rather than simply indulging in the somewhat megalomaniac occupation of enlarging his or her own lifelist, this is an ideal environment, and there are several eager and somewhat overlapping receptacles for his help and data :-

1) the journal Scopus

The Ornithological Sub-Committee of the Society publishes four issues of this bird journal annually, together with a fifth issue, the East African Bird Report, which details important bird records for the year. As noted in the above-mentioned article, Scopus is a most useful companion to the birdwatcher in East Africa, with a wealth of detail ranging from birdwatching to solid ornithology, while the increasing incidence of contributions from Somalia, Ethiopia and the Sudan are extending its coverage under the eastern part of the African continent, rather than just East Africa sensu stricto. Scopus welcomes contributions from local enthusiasts, and is the ideal vehicle for the fairly rapid publication of short notes and longer articles on birds.

Subscriptions cost KShs 75.00 per annum to East African residents (rates for abroad available on request); members of the EANHS who do not subscribe to Scopus are still entitled to a free copy of the East African Bird Report, on application. All details from Don Turner, P.O. Box 48019, Nairobi.

2) the Nest Record Scheme

birds breeding outside the tropics do so during quite well-defined seasons of the year so that, in the U.K. for example, breeding activity is predominantly restricted to the summer months of May, June and July, when more clement weather and the greater abundance of food provide optimum conditions. Within the tropics, however, where food and weather conditions may be favourable for much of the year, the timing of breeding is much less well understood. Some species appear to breed almost continuously, while many do so only at the onset of wet periods; still others breed in the drier months.

The EANHS has set up the Nest Record Scheme to gather data on bird reproduction in East Africa, and the very substantial amount of information in its files is frequently consulted by scientists all over the worls, and has been summarised in The Breeding Seasons of East African Birds (Brown & Britton 1980; publ. EANHS). But much still remains to be learnt, and an examination of Brown & Britton soon shows the paucity of records for many species. Furthermore, a recent complete examination of the N.R.S. files by workers on the atlas project (see below) showed that there is a great tendency for observers to be restricted to centres of population - which means Nairobi.

Hence there is still much more to contribute to this scheme, particularly in areas away from Nairobi; sequential visits to nests are prefered but every single observation of quite uncomplicated breeding behaviour are definitely of use.

Nest record cards, on which to record and send in observations, and all details of the scheme, can be obtained from the organiser, Barry Taylor, P.O. Box 25138, Nairobi; telephone Karen 2019. Several N.R. cards should be as much a part of a birdwatcher's field kit as his notebook and fieldguides. Cards are available, free of charge, from the Society's office.

3) the Kenyan bird atlas

this project is aimed at mapping the distributions and areas of breeding of all birds that occur, or have occured, in Kenya. It is already well advanced (details published in the EANHS Bulletin pp. 64-70, 1982; copies available from the EANHS office) with over 25,000 observations on its files, and rapid publication of the results in the form of a book will provide a valuable reference and conservation document. Contribution of data to the scheme is simple, merely requiring lists of bird species from any locality in the country; all contributions will be fully acknowledged in the published version. Full details, literature and lists for the sending in of data can be obtained from Adrian D. Lewis, Geology, P.O. Box 30197, Nairobi. A similar scheme is being run for Tanzania by Don Turner (address given above).

4) the East African Bird Ringing Scheme

the Society organises bird ringing throughout East Africa, and its rings have also been used since 1977 in areas of the Sudan. The 'star attraction' of the scheme is certainly the spectacular catching of nocturnal migrants from the Palaearctic at Ngulia Safari Lodge in Tsavo West, where many hundreds of birds may be caught in a single night, but there is also substantial ringing efforts in Nairobi, at Lake Magadi, and on the coast at Mida Creek. Experienced ringers are prefered for this work, but there is usually plenty that less specialised enthusiasts can do to help. For details, contact the ringing organiser Graeme Backhurst, P.O. Box 24702, Nairobi; phone 891 419, or Dave Pearson, Biochemistry, P.O. Box 30197, Nairobi, phone 47041.

Adrian D. Lewis, Geology, P.O. Box 30197, NAIROBI

AN AVIAN MIMIC

That superb songster the Ruppell's Robin Chat, Cossypha semirufa, is just a fantastic mimic. I heard a flock of Eurasian Bee-eaters, Merops apiaster, fly over - rushed for my binoculars and into the garden only to find that the 'bee-eater song' was coming from the bottom of a lantana bush. Listening carefully then from the same spot, out came the song of Emerald Cuckoo, Chrysococcyx cupreus and Didric Cuckoo, C. caprius several times repeated in that order and sung together without much pause. Often then the bird will intersperse the calls of the Black Cuckoo, Cuculus calmosus, both the whistling call and the 'yaffling' followed by that of Klaas' Cuckoo, Chrysococcyx klaas and Red-chested Cuckoo, Cuculus solitarius, thus making the calls of five Cuckoos in a few minutes. Sometimes the calls are a little distorted, showing that it is in fact the Ruppell's Robin Chat mimicing.

Robin Chats are, of course, well known for their mimicing as well as for their own individual calls. They are always busy early morning and late evening - the only diurnal bird to keep later hours is the Northern Olive Thrush, Turdus abyssinicus. At the beginning of the rainy season the Robin Chats are busier than ever in their various territories - we have two Ruppell's near our house at Kitisuru in Nairobi, one on either side. Nearly every day they will start singing at midday too and in the afternoon and it is at these times that they seem really to have fun mimicing other birds. When one hears the calls of the Montane Nightjar, Caprimulgus poliocephalus, at midday there is no doubt that it is the Robin Chats imitating, which will become clear when the bird puts in a few twiddly bits or strings it together with another call.

Sometimes we hear the bird whistling very softly to itself, so it seems, or perhaps it is practising new calls. The other day it was a Chin-spot Batis, Batis molitor, that was being imitated. At first the last note did not come quite right, but after a few goes it was indistinguishable from the call of the real bird. The Ruppell's likes to sing softly to itself for a long time, but if you are trying to put the voice on tape and play it back, the immediate effect is the challenging 3-note territorial call, harsh, loud and clear.

It is easy to see how the Ruppell's will learn the calls of other species of birds in the same area, but how does it learn the calls from birds, which, to my knowledge, do not occur nearer than 30 or 40 miles ? We have unmistakably heard the Robin Chats mimicing the Red and Yellow Barbet, Trachyphonus erythrocephalus. This made me quite confused one morning when I woke up to hear the bubbling call familiar from the dry bush country, and I thought I was on safari. We have also heard short phrases with imitations of the characteristic call of the White-browed Robin Chat, Cossypha heuglini. They are so definitely like the real calls of these birds, that it would be too much of a coincidence for the songs to be anything but imitations. But why does he do it ? In nature there is always supposed to be an advantage in certain behaviour. Could it be that the Robin Chats just enjoy singing anything - aomething that they have heard or something they compose.

The common craze of our two Ruppell's at the moment is to imitate the warning call of the Fiscal, Lanius collaris. They try to outdo each other playing Fiscals - even though it is a long time since we have had a resident Fiscal in the garden. And they often sing the song late in the evening long after the Shrike would normally have stopped calling.

Nothing is too much for the bird: the woman across the valley whistling for her dog, the Grey-capped Warbler, the Augur Buzzard or Long-crested Eagle, the Common Bulbul or Yellow-rumped Tinkerbird, not forgetting the bird's own characteristic song and various tiddly-pom notes. We have got them all in one - sung by that fine mimic, the Ruppell's Robin Chat.

Lise Campbell, P.O. Box 14469, NAIROBI

NYLON - AND ITS INSIDIOUS DANGER TO BIRDS

On a recent trip to Lake Turkana - - -

Crows and Ravens everywhere use all kinds of waste material in their nest building - and the Brown-necked Ravens, Corvus ruficollis, at Turkana are no exception. One would think that there is little man made waste here - and this if fairly true - except for the ever increasing quantity of discarded nylon fish net. Much of this is colourful, and all the nests we found had some of this stuff in them.

One evening, from a distance of about 400 metres, we noticed an Egyptian Goose, Alopochen aegyptiacus, perched on a branch in a large Acacia tree, flapping its wings madly. Not until we stopped to check with binoculars, did we realise the reason for the violent activity.

Immediately above him was a disused Raven's nest, and hanging down from it was a length of discarded fish net - it would appear that he had reached up to peck at it, and had become entangled by the neck, the more he struggled, the more he became entangled, and had we not been there, it is certain that he would have hung there until he died.

We drove over and parked the car below, in order to try and reach up and free the struggling bird - our presence, a new and more terrifying problem to him, scared him into even more violent flapping, and before we could reach up to help, the nylon pulled loose and the bird fell down - to run and flap away with his anxious mate, who had all the time been running about on the ground below, in a fine old state.

This one was lucky, but one tends to wonder how many do not get away with it ?

Peter Davey, P.O. Box 15007, NAIROBI

RECIPE FOR EASY BIRDWATCHING

Ingredients : One small green bush snake
One Commiphora zimmermanii of goodly proportions
in Spring Valley garden
Birds - various

On 24th June, take a bush snake of elegant green. Coil neatly and place, with head protruding from coils, in a V approximately 15 feet from the ground, made by the trunk of a Commiphora. Leave situation to simmer. When warning bird calls reach hysterical proportions, investigate.

You will see the following (in varying numbers) encircling the snake : Mousebirds, White-headed Barbet, Olive Thrush, Baglafecht Weaver, White-bellied Tit, Common Bulbul, Streaky seed eater, Yellow-rumped Tinkerbird, Violet-backed Starling, and the Sunbirds - Bronze, Amethyst, Variable and Collared.

The smaller the bird, the more vociferous its disapproval. One demented female sunbird ventured to within about half an inch of the snake, voicing hysterical alarm.

Finally the little green snake could take no more and in one lovely fluid movement slid to the ground, its progress marked all the way by bird screams.

D. Brass, P.O. Box 59196, NAIROBI

THE BIRD ATLAS FOR KENYA: A REQUEST FOR INFORMATION

ON PLACE NAMES

The whole of the EANHS' Nest Record Scheme has been incorporated into the forthcoming Kenyan bird atlas but, even with the aid of two gazatteers ("Kenya Official Standard Names Gazetteer No 78" (U.S. Dept. of the Interior) and the one in Britton's Birds of East Africa), there are still some geographical names that we are unable to place. A list of these names is given below, together with such supporting details as may aid their location, in the hope that some members, particularly those who have been in Kenya a long time, may know them. All correspondence please to Adrian Lewis, Geology, P.O. Box 30197, Nairobi; all replies will be answered, and acknowledged in the published atlas.

The localities :

Invisible Island, Lake Victoria, Kenya
Geiro, east of Kongwa
Seminis
Nyardho School, Buburio, South Nyanza
Rabous or Rabow Island, Lake Victoria, Kenya
Ntheriri, Embu District
Nguo River, Embu District
Obok, South Nyanza; 6,500 ft a.s.l.
Kiauguugi, Embu District
Ngandini, Embu District
Ndagumui, Embu District
Kamauno, Embu District
Muchonoke, Embu District
Msinga, Tsavo East
the Garissa - Afmadu road
Mpakani Isles, near Lamu
Mlango wa Bomawani, near Lamu
Garabani
Fig Tree Island, Lake Victoria
Ololokai, Samburu District
Syokimau Farm
Suk, western Kenya
Apis Rock
Wattle Blossom Farm, Athi plains
Lower Meru
Campi ya Moto
Hwessess, N. Kavirondo
Embakaai Crater
Kapsorwa Escarpment

EASTER WEEK END CAMP AT MARALAL

The Easter week end found a good many of our members, *Homo sapiens*, (there were fourteen parties) happily hammering in tent pegs while casting anxious glances towards the gathering clouds and the surrounding thicket where Buffalo, *Syncerus caffer*, were said to roam.

We were guests of Pat and Robin Morgan on a demonstration farm at Maralal where they raise cattle to upgrade the Samburu stock and do other good works to improve Samburu life and give them a better chance for the future.

Most people arrived on Friday after having spent the night at T. Falls, pardon me, Nyahururu. Nobody seems to have had any difficulties on the road, the last stretch of which is rather rough going. But then that's part of safari life anyway.

Friday was spent getting settled in and the evening found us all assembled around a roaring camp fire, courtesy of the Morgans, with Pat and Robin paying a visit and telling us about the farm and their work with and for the Samburu, as well as outlining the programme for the following days.

Saturday morning the Morgans led us to the magnificent viewpoint at Losiolo where almost the whole of the NFD was spread at our feet. After a picnic lunch at the first viewpoint the more intrepid descended through thick bush into a valley separating us from the next viewpoint at 8124 ft altitude, which they then climbed to get a different view, looking more towards the west, all the way to Lake Baringo, or so they said.

Some of us though felt quite content with our first view of the magnificent northern scenery and hoarded our energies for the next day's trip.

Close to Losiolo viewpoint we all enjoyed a rare treat, the sight of the uncommon Denham's Bustard, Neotis denhami jacksoni, looking rather like a female Kori Bustard fresh from the beauty parlour where it had the back of its neck dyed a fiery red; and a beautiful sight it was too.

Sunday morning Robin kindly took us in hand again leading us towards the river which forms the boundary of the farm, then on to the dam. Along the way many birds came our way, but we missed seeing the unusual grouping of seven or eight Hammerkops, Scopus umbretta, that Robin had seen there recently. After helping him chase away some encroaching cattle, we took stock of the waterbird population on the rather shrunken dam: Egyptian Goose, Alopochen aegyptiacus, Red-billed Teal, Anas erythrorhynchos, Grey Heron, Ardea cinerea, Yellow-billed Duck, Anas undulata and a few migrant waders.

The highlight of the morning was undoubtedly the Tawny Eagle's nest Aquila rapax, high on the top of a Juniper tree with two well-grown but still downy white eaglets in it. This was apparently considered an excellent protective device against hawks and falcons by a colony of Speke's Weavers, Ploceus spekei nesting directly underneath the eagle's nest.

Amongst the birds sighted or heard during our morning walk through the bush I would like to mention the following : Red-throated Wryneck, Jynx ruficollis, which was first heard, then seen; Blue-eared Glossy and Hildebrandt's Starlings, Lamprotornis chalybaeus, Spreo hildebrandti, interesting to note that both the Black-headed and Brown-headed Tchagra, Tchagra senegala and T. australis were present. We heard their very different songs as well as the noisy wing-flapping display of the Brown-headed.

Animal lovers as well as bird lovers were catered for, as a number of Burchell's Zebra, Equus burchelli, are presently resident on the farm and a very approachable lot they are. You can get almost close enough to touch them, quite a welcome change from the many very shy zebra I have recently come across in several of the Game Parks.

Buffalo were also present, although not seen by us, only the day before our arrival did Robin encounter a herd of them as they were surveying our campsite. Having found everything in order, they then retired and left it to us.

An added and unexpected high point of the week end was the leopard hide on the grounds of Maralal Lodge, adjoining the farm where we camped. Three Leopards, Panthera pardus, have been seen there recently quite often, taking the bait of goat-meat set out by the Lodge. Some in our group were lucky to see them, as well as a solitary and very good-looking Hyaena, Crocuta crocuta.

On Sunday afternoon we set off to the nearby Karisia Hills where we walked in the magnificent Lorogi forest and even the pouring rain couldn't dampen our enthusiasm. While so much of our native forest has succumbed to the ever increasing population pressure, it was a welcome relief to experience this section of the Forest Reserve that had not yet caught the eager eye of those that delight in replacing every bit of 'useless' indigenous forest with some commercial stand of exploitable exotic wood. Here the Brown Olive, Olea africana, and the Podo, Podocarpus sp. still hold sway, richly garlanded with various species of Orchids to the delight of all of us and especially to Mike Gilbert who added quite a few examples to his collection.

Most people had to heed the call of duty and departed on Monday, but three parties stayed on for another night clostered close around the campfire. After a shower on Monday we observed several African Hobbies, Falco cuvieri , circling and swooping down on a mass of flying termites that had come out in force, catching them with their feet and transferring them to their beaks in flight.

This last day also presented me with a special gift, the sight of my very favourite bird: Violet-backed Starlings, Cinnyricinclus leucogaster. To me no other bird in East Africa surpasses it in beauty and elegance. But I am considering submitting a request for a change of name (a pastime very much in vogue recently). Its colour is that of the best quality amethyst; to call it violet is not only misleading, but a bit of an insult, I feel, it sounds too common.

I want here to express again our heartfelt thanks to the wonderful hospitality of the Morgans and our appreciation for all the work they have done in preparing our campsite and their enthusiasm and kindness in taking such wonderful care of us.

Judith Rudnai, P.O. Box 56519, NAIROBI

BOOK REVIEWS

RIFTS AND VOLCANOES - A study of the East African Rift System. Celia Nyamweru. Nelson Africa. pp 128, 58 figures, 35 plates. Price KShs 65/-.

Some knowledge of geology is of value to the natural historian, nowhere more so than in Kenya, which owes its rich ecological diversity and wealth of wildlife to its geological heritage. Much of the country lies within the Afro-Asian rift system, commonly referred to as the Great Rift Valley. Dr Nyamweru's knowledge of this area is considerable and she has written a number of scientific papers on its lake basins, but this, her latest book, is directed to the layman.

Suggestions for further work and reading at the ends of each of the book's four chapters indicate its original purpose as a textbook for O and A level students, but this in no way detracts from its value to the general reader wishing to acquire a clear understanding of the Rift system, its faulting and vulcanicity, its effects on the humans who inhabit it, and its significance as a world geological feature. Volcanic activity and earthquakes in the region, past and possible future ones, are discussed, as are the two scales, Richter and Mercalli, by which the severity of earthquakes may be measured. The last chapter deals with the relatively recent theory of plate tectonics, and while its implications are worldwide, there is special reference to East Africa.

I have to confess that I found some of the earlier part of the book, with its short sentences and constant reference to the many figures in this section, rather irritating to read. But the diagrams are pertinent and admirably clear, and if you already understand the terms they illustrate, it is easy to skip these early pages. If not, it is worth pausing to assimilate them. Thereafter the prose flows smoothly, and the author had a great facility for presenting her data in a lucid and readily assimilable form, as those who have heard her lecture to the Know Kenya Course will know. Illustrations abound throughout the book, and if their reproduction is not always as good as one might wish, that, in these days of ecomomic stringency, is a fate common to all black and white photographs which have to share a page with printed text. One knows that her origonal photographs (and most of them are the author's own), would have been of meticulously high quality, and they still serve her purpose well.

The text contains some fascinating nuggets. For instance, while I knew that the Yatta Plateau was a solidified lava flow, I had not appreciated previously that it had originally formed within a river valley, the surrounding land having eroded away over millions of years to leave the lava flow standing now as a ridge. Again, I view my house with new interest now that I know it is built not, as I thought, of 'stone', but of welded volcanic tuff.

All in all, this is a most informative book, its text supported by clear diagrams and many illustrations, backed with a useful glossary and bibliography and a table indicating the mineral deposits to be found in the region. It will provide a valuable addition to any collection of books about Kenya.

Joan Karmali

A NOTEBOOK FOR KENYAN DYERS by Lorna Hindmarsh, National Museums of Kenya, Nairobi, 1982, 66pp.

This is an extremely interesting small notebook depicting different kinds of dyes which can be obtained from local material such as plants, soils and other minerals. It also discusses the various methods of preparing dyes from these natural products. Since not all plants and soils mentioned have common English names, the author had, therefore, arranged the plants in alphabetical order according to their scientific names. Under each species, both English and/or vernacular names are also listed where possible. Each species discussed has under it, the part of the plant that yields the dye, who collected the material, and the colours (dyeing material) obtained through the use of different extraction methods. A number of plants in the book are also known to have been used in traditional dying techniques for many years. It is therefore, most appropriate to see the traditional art being properly recorded for both the present and future use and reference. Some species are illustrated, and this would further simplify identification for potential readers and researchers in this field.

Probably the most fascinating part of the book is that of the "guide to plate of colours" which in each case, gives the colour expected, dye material and the mordant used. This has in fact, made the book a very handy practical guide in the field of dying industry.

I am sure Kenyan Geographers and Surveyors would have offered the author a better map of Kenya than the one presented one page 19 of the book. Also missed by the proof.-reader was Zanthoxylum usambarense (not Xanthoxylum usambareses) on page 64. Apart from these two minor points, I recommend the book as a good piece of work from a elderly devoted Kenyan lady.

J.O. Kokwaro

NOTICE TO ANYONE INTERESTED IN BIRDS

Are you a birdwatcher/photographer/ringer newly arrived in Kenya, and in search of details of local birds, good areas to visit, relevant literature and ringing and other research schemes ? Contact Adrian D. Lewis, (Geology, P.O. Box 30197, Nairobi) for information.

THE CHAMPION FUND

In answer to questions about this fund at the Extraordinary General Meeting in April, we are now able to supply the following details :

Mr Champion was President of the Society during 1949 and 1950 and died in June 1951. He left to the Society the Gold Medal awarded to him by the Royal Geographical Society, his africana books and Shs 6,000/-, which was placed in a savings account. The medal was placed with the Bank of India for safe-keeping and the books in the Library.

With accumulated interest the Fund stood at Shs 6,788/85 in December 1956. Then Shs 3,000/- was used to publish the E.C.G. Pinhey paper "The Emperor Moths of Kenya" in the Journal No 98, 1957. At the end of 1957 the fund stood at Shs 4,159/10. In July 1960, Shs 1,500/- was used to cover bird ringing expenses, and in July 1961 Shs 500/- was used for the same purpose. In September 1962 Shs 1,000/- was used for printing expenses, and in November 1962 Shs 340/- from the Fund was used for ringing flamingoes at Lake Magadi.

The balance has accumulated interest and at December 31st 1981 stood at Shs 7,547/55.

WANTED

One copy of Dale and Greenway's 'Kenya Trees and Shrubs' needed urgently. Please contact Miss J.N. Moody, Tigoni Academy, Private Bag, LIMURU, Kenya

One copy of Dr Piers' 'Orchids of East Africa' 1968 edition. Please contact Miss P. Jenkins, P.O. Box 1752, BLANTYRE, Malawi.

FOR SALE

Mrs R.E. Measures has very kindly donated to the Society for re-sale :
Four solid butterfly setting boards, cork lined of various sizes. Can be seen at the Society's office. Shs 50/- each.

HOUSE WARMING/EXCHANGE

December 1982/January 1983 for four to six weeks. English family would like a largish house in Karen/Langata/Westlands areas. Please contact M. Charleston, telephone 891220.

ACCOMMODATION REQUIRED

Mr Stephen Spawls, of snake fame, is looking for a guest house, flat or a couple of rooms to rent in Nairobi during August. If you can help, please contact the Secretary, P.O. Box 44486, NAIROBI.

SOCIETY NOTES

Membership Application forms are included in this issue of the Bulletin. Please pass them on to friends, or pin one up at your place of work as we need more members in order to promote the activities of the Society. It costs only Shs 35/- for a half year membership from July to December, and there are many interesting functions that new members should enjoy.

Posters These attractive posters are available free of charge from the office, or write to the Secretary, P.O. Box 44486, NAIROBI. We would like to see a poster in every office and school, so please help.

Nest Record Scheme Another reminder that the Scheme organiser, Barry Taylor has moved to Nairobi and all completed nest record cards should be sent to him at P.O. Box 25138, NAIROBI.

Wanted - A Book Checker Any member who could spare us a morning or two during the week to help with the checking of faulty copies of Birds of East Africa, please contact the Secretary.

Reminder that the office is closed all day on Monday.

Kwaheri to Mike and Caroline Gilbert who have been great supporters of the Society. We wish Mike all the best in his new job of working of the flora of Ethiopia at Kew.

The Wild Flowers of Kenya We were only able to buy five copies of this new Collins guide by Sir Michael Blundell, and they sold out in as many minutes. However, more stocks are on order and are expected here in late August by sea mail, so please place your order with the Secretary.

Aquarium A reminder to new arrivals in Kenya that there is a good marine aquarium housed at the Snake Park, in the National Museum grounds. An ideal place to bring the children during the school holidays.

Places to Visit We would like to start a series in this Bulletin on 'Places to Visit'. If you have recently been to an interesting area, please write it up for the Bulletin giving the approximate distance from Nairobi, condition of roads, accommodation, if available, and the birds, plants, mammals etc you observed. Not only would this be of use to members recently arrived in Kenya, but might give Lise Campbell, our functions organiser, some ideas for Society trips. We look forward to hearing from you.

Library Do you make full use of the excellent library owned jointly by the Society and the National Museum and housed at the National Museum ? Full members may borrow non-reference books while junior members may read in the Library. We have an outstanding collection of africana books as well as a vast collection of periodic journals. Do make use of this facility; Library hours are Monday to Friday 8.30 - 12.30, 2 p.m. - 4.30 p.m., Saturday from 8.30 to 12 noon. Make sure you have your membership card.

Leslie Brown Reprints Mrs Barbara Brown has kindly given the Society a box full of reprints of scientific articles written by the late Leslie Brown. These are available free of charge to any member who could make use of them; a list of the reprints available is included with this issue.

Selous Game Reserve Members, in Tanzania at least, may be interested to know that safaris to the Selous Game Reserve are arranged by Cordura Ltd., Safari Reservation Office, Oyster Bay Hotel, P.O. Box 2261, DAR ES SALAAM, Tanzania.

BOOKS !! Old or new - we have them. Please call into the office and look at our selection, both of books in print on all natural history subjects, and out-of-print Africana books. Special members discount on most of our stocks.

Bird Song Record A reminder that we are still holding stocks of the Birds of the African Rain Forest - two records of 331/3 size for only Shs 90/-.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Mr Speich Andreas, P.O. Box 59434, NAIROBI
Inderjit Singh Bhachu, P.O. Box 41474, NAIROBI
Dr Herma von Bonin, P.O. Box 43278, NAIROBI
Mr and Mrs P. Childs, c/o Cooper & Lybrand, P.O. Box 30158, NAIROBI
Leif Christensen, Royal Danish Embassy, P.O. Box 40412, NAIROBI
Roy, Timothy and Carol Fellows, P.O. Box 30158, NAIROBI
Mr and Mrs Fisher, P.O. Box 30261, NAIROBI
P.C. Fletcher, P.O. Box 43675, NAIROBI
Jean Griffiths, Medical Training Centre, P.O. Box 30195, NAIROBI
Susanna & Bjarne Jorgensen, P.O. Box 520, KISII, Kenya
Ms Shereen Karmali, P.O. Box 42202, NAIROBI
Mr M.A.K. Khan, P.O. Box 30156, NAIROBI
S.G.A. Leak, P.O. Box 30709, NAIROBI
Mr and Mrs K.L. Mortensen, Ritumbe Mission, P.O. Box 486, KISII, Kenya
Monica G. Smale, Kenton College, P.O. Box 30017, NAIROBI
Dr and Mrs M.E. Smalley, Zoology Department, P.O. Box 30197, NAIROBI
Pritpal Singh Soorae, P.O. Box 44919, NAIROBI
Richard D. Winter, P.O. Box 45992, NAIROBI
Mrs J.R. Wood, P.O. Box 24615, NAIROBI

Local Junior Members

Ohad Azoulay, P.O. Box 44472, NAIROBI
Ravit Azoulay, P.O. Box 44472, NAIROBI
Daniel Barz, Athi House, Nairobi School, P.O. Box 30047, NAIROBI
Waseem Mirza, P.O. Box 43336, NAIROBI
Peter Mburu Munguih, P.O. MBARI-YA-NJIKU, via Kikuyu, Kenya
J. Masau, Naivasha House, Nairobi School, P.O. Box 30047, NAIROBI
Bimal H. Patel, P.O. Box 45377, NAIROBI

Overseas Full Members

James Anderson, 1088 Belvedere In, SAN JOSE, California 95129, U.S.A.
Mr and Mrs J. Beakbane, P.O. Box 40, MUFINDI, Tanzania
M.D. Bidder, Prospect Cottage, Lower Park Road, BRAUNTON, Devon, U.K.
Mr and Mrs A. Boswell, P.O. Box 40, MUFINDI, Tanzania
Glyn Lewis, P.O. Box 468, ARUSHA, Tanzania
L.C. Rookmaaker, Dokter Guepinlaan 23, 4032 NH Ommeren (Gld), The Netherlands

Overseas Life Member

Dr Robert C. Drewes, California Academy of Sciences, Golden Gate Park, SAN FRANCISCO, California 94118, U.S.A.

SOCIETY FUNCTIONS

Monday 12th July 1982 in the Museum Hall, Nairobi at 5.30 p.m. Filmshow ; 'Castles of Clay'.

Sunday 8th August 1982 Informal Day trip. Please meet at the National Museum at 9 a.m., prepared for a day in the 'bush' and bring with you ideas on where you would like to go, as well as a picnic lunch and walking shoes.

Monday 9th August 1982 in the Museum Hall, Nairobi at 5.30 p.m. Mr Stephen Njuguna will give an illustrated lecture on 'The Ecology of the Naivasha Lakes'.

Weekend 27th - 29th August 1982 Accommodation in self-service bandas or camping at Fisherman's Camp, Lake Naivasha. We have been offered the following special terms for the week-end at 'Top Camp', overlooking the lake. Camping completely self contained: Shs 20/- per person, children Shs 10/-. Accommodation in self-service bandas with 2 or more beds: Shs 40/- per adult and Shs 20/- per child. Each banda had beds, pillows, gas light and a 2-burner gas cooker, running water, table and chairs. Rowing boats are available free. A lovely area for walking in the hills, bird watching and fishing(licence necessary). Members wishing to take part in this field trip should please fill in the enclosed form and return it to Mrs A.L. Campbell, P.O. Box 14469, Nsirobi with a self-addressed, reply paid envelope, as soon as possible. The cottages will be alloted on a first come first served basis.

Sunday 12th September 1982 Informal Day trip. Please meet at the National Museum at 9 a.m., prepared for a day in the 'bush' and bring with you ideas on where you would like to go, as well as a picnic lunch and walking shoes.

Monday 13th September 1982 in the Museum Hall, Nairobi at 5.30 p.m., Mr Nathaniel arap Chumo, Director of Wildlife Clubs, Kenya , will give an illustrated lecture on the work of the Clubs in furthering the interest in conservation.

Sunday 26th September 1982 Day trip to Limuru. Please meet at the National Museum at 9 a.m. sharp. bringing a picnic lunch if you wish to stay all day.

October 8th - 10th 1982 Week-end camping at Eserian Farm by kind invitation of Mr and Mrs Carnegie. Details later.

Sunday 10th October 1982 Informal Day trip. Please meet at the National Museum at 9 a.m.

Naro Moru River Lodge During September and October this year members of the Society have been offered up to 15% discount on full board and self service cottage accommodation. Bookings should be made individually direct to the manager of the Lodge, stating membership number.

Further discounts will be given for a Society field trip on the week-end of 19th, 20th and 21st November at the same Lodge. Details later.

IMPORTANT No camp details will be sent to members not including self addressed and reply paid envelopes.

WEDNESDAY MORNING BIRD WALKS continue, rain or shine. Please meet Fleur Ng'weno at the National Museum at 8.45 a.m.

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., M.E.J. Gore, Miss S. Karmali
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Mrs. C. Taylor
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton **(Editor EANHS Bulletin)**, Mrs. J. Hayes, Dr. A.D. Lewis, D.A. Turner
Co-opted Members: P.B. Taylor (Nest Record Scheme Organizer), Mrs. F. Ng'weno, S. Njuguna, Dr. D. Pearson, D.K. Richards, Mrs. P. Wootton, P. Davey
Journal Editorial Sub-Committee : M.E.J. Gore, Miss Karmali
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E.Pomeroy, D.K. Richards, T. Stevenson, P.B. Taylor, Dr. K. Howell, J. Beesley, N. Baker, (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds, P.L. Britton (United Kingdom)
Joint Library Sub-Committee : (Society representatives) Mrs. C. Taylor, M.P. Clifton.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
NH

EANHS

BULLETIN

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

EANHS BULLETIN SEPTEMBER/OCTOBER 1982

CONTENTS

Exotic Birds in Mombasa 74
Young Red-billed Teal Escapes Death 74
Prey of the Black-headed Heron at Njoro 75
Albinism in Blue-eared Glossy Starling 77
The Importance of Dams 77
An Aggressive Augur Buzzard 85
A Bird Atlas for Kenya: Further Progress 86
Warning to Campers at Samburu 92
Camp Hygiene 92
Notice to Anyone Interested in Birds 92
The Kenya Astronomical Society 93
Information Wanted 93
Books Wanted 93
Thanks 93
Society Notes 93
New Members 95
Society Functions 96

EXOTIC BIRDS IN MOMBASA

House Sparrow, Passer domesticus J.G. Williams in his book published in 1967 reports the presence of the Indian race of the House Sparrow in Mombasa. I have been in Mombasa since 1953 and was a frequent visitor to the port between 1953 and 1961. I never saw a House Sparrow nor did I discover anyone who had seen one, although I knew they had been reported previously as Mr Williams had asked me if I had seen them on several occasions. Nine years ago, Mr D.G. Sevastopulo told me he had seen a pair of House Sparrows in the port area. Since then he has told me on several occasions that he had seen them. P.L. Britton said he saw one near the Post Office three years ago.

In May 1981 I saw a flock of between 25 and 30 at the Old Terminal, Mombasa Airport. Since then they have increased in numbers.

In October 1981 there were several which appeared in the neighbourhood of the Manor Hotel and also around garbage cans on the other side of Moi Avenue.

By December 1981 they spread to the area of Mombasa Hospital and I saw one in the new year at the Three Hills Estate at Bamburi. However, expansion in that area has ceased owing to drought followed by exceptionally heavy rain.

Indian House Crow, Corvus splendens This bird has increased in numbers since 1953. Amidst its habits are destroying nests and young of smaller birds, even sunbirds nests are attacked. This may have caused the complete disappearance of the Morning Thrushes, Mousebirds and the much smaller numbers of Golden Palm Weavers, Camaropteras and Rufous Chatterers.

During the same period there has been an increased use of insecticides in Mombasa which may have had an effect on the disappearance of some of these birds.

Feral Pigeon, Columba livia I have not noticed either an increase or a decrease in numbers of these birds since 1953.

Rose-ringed Parakeet, Psittacula krameri This was an infrequent visitor to our garden from 1953 to 1960. It came when the seeds of the Pride of Bermuda tree were ripe.

Fischers and Yellow-collared Lovebirds, Agapornis fisheri and A. personata These and the hybrids between the two have been seen in varying numbers for approximately 15 years. They are caged birds purposely let loose and they depend on people feeding them to be able to stay in the wild all year round. Their numbers vary considerably. They have been less common recently.

Mr Rowland McVicker M.B.E., P.O. Box 90664, MOMBASA

YOUNG RED-BILLED TEAL ESCAPES DEATH

While photographing an adult Red-billed Teal, Anas erythrorhynchos and it's nine ducklings at 11.45 hours on the morning of 11th July 1982, at a pond near the East Gate of the Nairobi National Park, one duckling was caught by something when the group were feeding in a patch of aquatic grass about five metres from the pond edge where I was parked. Upon the initial alarm call by the affected duckling, the adult drove the remaining ducklings from the immediate vicinity and then proceeded to harass the still submerged and unseen attacker. She moved away periodically calling for the duckling to follow, but in vain. It was obviously well caught and unable to move away. After about five minutes it broke free whereupon the adult immediately drove it directly towards my vehicle, and placed it on land about two feet from the waters edge and next to my vehicle. It seemed to me that this was a purposeful act as it would have been as easy for her to drive it elsewhere without any additional trouble. Having placed the duckling, the adult returned to the remainder of her brood now some 15 to 20 metres away, and slowly brought them on land towards my vehicle. The duckling was observed to have one leg badly damaged and was obviously exhausted after it's frantic struggle.

I suspect that the duckling was caught by a terrapin, although I did not see one at the scene. There were, however, some in the pond. It is possible that the terrapin's need for air may have caused it to release it's prey, and this could have happened without my seeing it as the grass patch was fairly thick.

Pat J. Frere, P.O. Box 14490, NAIROBI

PREY OF THE BLACK-HEADED HERON AT NJORO

It is well known that the diurnal and nocturnal birds of prey throw out the indigestible items of their prey in the form of pellets and not so well known that other species do likewise, such as barbets, bee-eaters and some herons.

A number of Black-headed Herons, Ardea melanocephala, have nested colonially in trees along the main 'duka' street in Njoro, Kenya, for the past few years and knowing that the heronry was active in December 1981, I persuaded Rosalie Osborne of Egerton College to collect a few pellets for me. On examination, these would give some idea of the diet of the Njoro birds which can be seen feeding in the grasslands and fields around Njoro.

In the sample there were three whole pellets which had a dry weight of 8.7, 8.9 and 6.7 grams and measured 8 x 3.5 x 2.2 cms (laterally compressed) ; 6.0 x 3.1 x 3.1 cms, sausage shaped and the third of 5.1 x 3.5 x 2.5 cms, laterally compressed. The other pellets in the sample were broken but the mass weighed 57.7 grams.

These pellets which appeared to consist solely of fur were teased out with forceps to remove all recongnisable pieces of bone, hard insect chitin, scales, feathers etc. The results are of considerable interest as they show the Njoro herons prediliction for rodents as prey, but more astonishing was the near absence of rodent bones. These were represented by one small humerus of 18 mm, one ulna of 19 mm, one damaged pelvic of 16 mm, a fragment of the premaxilla with two incisor teeth of a small rodent undertermined but probably Mastomys, and two caudal bones of undetermined species.

This absence of bone samples suggested that the digestive system of the Black-headed Heron is able to reduce bone, whereas birds of prey always have bone fragments, even complete skulls, in their pellets, thus making prey analysis relatively easy.

With so little bone material it is impossible to judge the size or number of prey items represented by the sample. Stanley Cramp (Ed.) 1977 in Vol. 1 of the Handbook of the Birds of Europe the Middle East and North Africa records that the Grey Heron, A. cinerea, is known to take water shrews, Neomys; Moles, Talpa; Water Voles, Arvicola; and Field Voles, Microtus, but it feeds mostly on fish or creatures near water, similarly the Purple Heron, A. purpurea, though the latter is also recorded as taking small rodents. Mackworth-Praed & Grant record "small mammals including rats" for the Black-headed Heron, but they state "they feed largely at night". This is certainly not our experience for birds are to be seen throughout the day hunting in the grasslands and in fact they constitute a nuisance to aircraft at Malindi where they feed along the runway. At Miotoni, Karen, Herons return to roost in the city every evening around 18.30 hours and return to the Karen grasslands at 06.30 - 07.00 hours.

This diurnal feeding led us to concentrate on the diurnal rodent species in trying to determine the species fur in the pellets and by macro and microscope examination we are reasonably satisfied that most fur is from the Grass Rat, Arvicanthis niloticus, a common grassland diurnal species. The small quantities of white fur were probably from the belly of the field rats, Grammomys surdastur or Thallomys nigricauda.

The formation of the pellets was curious as there were two distinct types. In the first the fur was concentrated into extremely dense, almost spherical bodies in which it was expected a nucleus of some hard substance would be found. This was not, however, the case. All these balls were then gradually coalesced to form the sausage-shaped pellet. The second form consisted of stratified collections of fur so that sections could be peeled off, and the balls of fur were absent.

In addition to the rodent remains some fragments of grasshoppers were found, particularly the extremely hard mandibles which showed that several species were taken. The large mixed feeder, some 5.5 cms long, Cyrtacanthracis tartarica; two forbivorous species, around 3.5 cms long, Phaeocantops decoratus and Acorypha sp.; one graminivorous species of 3.5 cms, Gastrimargus brevipes, and two mixed feeders of 2.0 and 2.5 cms, Acrotylus longipes and Ailopus thalassinus. Other small fragments were of elytra of beetles and the rest probably all grasshopper. In all pellets there were many small, mostly transparent, scales, some of which proved to be from a small snake. Frog bones or those of lizards were to have been expected but these were probably reduced by the digestive juices.

I have to thank Omolo Okelo for determining the grasshopper mandibles and Alec Duff-MacKay for assistance with the identification of the rodent fur and Rosalie Osborne for the pellets.

By the way, it may not generally be known that there is a large heronry in the blue gum trees right in the middle of the Railway Workshop Yards in Nairobi. This heronry has been in existance for over 25 years. In 1960 M.E.W. North, with the help of the workshops built an 80 foot tower amongst the trees from which he secured a fine series of photographs. See his paper in the Society's Journal, 'Breeding of the Black-headed Heron at Nairobi, Kenya' 1958 - 1962. No 106, price Shs 8/-.

G.R. Cunningham-van Someren, Dept. of Ornithology,
P.O. Box 40658, NAIROBI

ALBINISM IN BLUE-EARED GLOSSY STARLING

On the Narok - Longonot road, approximately 10 kms east of Narok on 1st August 1982 - - - single totally WHITE bird noticed in a large flock of Blue-eared Glossy Starlings, *Lamprotornis chalybaeus*. Close approach was possible, permitting positive identification as the same species, and also to confirm PINK eyes and legs.

Peter Davey, P.O. Box 15007, NAIROBI

THE IMPORTANCE OF DAMS

A study of birds of the Thika Road area, central Kenya

Within about 2 km of the main road from Nairobi to Thika there are at least 100 dams. Some have a water surface of less than 0.1 of a hectare, while a few exceed 10 ha; so they range in size by a factor of more than 100. The smaller ones are more prone to drying up, especially in years of low rainfall. Most are relatively shallow, rarely exceeding 2 m in depth, but more important from the birds' point-of-view are the margins - whether mud, grass, papyrus or other plants.

Between 1977 and 1981 we made a total of 77 counts of birds at three dams in the Ruaraka - Ruiri area. We believe these three to have been fairly representative of the medium and smaller types. There were two objectives: to consider their significance as conservation areas, and to study seasonality. The three dams can be described briefly as follows.

1 Kasarani (KS) (Grid reference (GR) = BJ6665).
Area approximately 1.0 ha, almost entirely covered with waterlilies; banks mostly grass, but papyrus and reeds at the shallow end, and trees along the dam wall. This dam remained full or almost so throughout the year, fed by a small seasonal stream; the lilies considerably reduced evaporation. In August 1981 the dam wall broke and it has held no water since.

2 Kitathua (KT) (GR BJ7072).
This dam, fed by a seasonal tributary of the Kimiti River, covers more than 2.0 ha when full. It is rather exposed and shrinks rapidly in the dry season, occasionally drying out completely. The margins are grassy, with extensive mud as the water drops. Cattle are frequent visitors.

3 Ruiru Sports Club (RS) (GR BJ7775).
Two adjacent dams but counted together. The upper one, of about 0.2 ha when full, is partly sheltered by trees; is has aquatic vegetation near the dam wall, and grassy sides. It

loses water slowly, rarely emptying completely, whereas the lower dam, up to 0.5 ha when full, leaks and is rarely full. At times it dries out completely, and in between large areas of bare mud are exposed.

COUNTS were made periodically, giving adequate coverage to all months of the year. 35 counts were at Kitothua, 25 at Ruiri and 17 at Kasarani. All birds on the water, or along the shores, were recorded, as well as obviously aquatic species perched on nearby trees. No attempt was made to disturb birds lurking in the vegetation, and undoubtedly such species as Common Moorhens and Squacco Herons were undercounted.

RESULTS The most interesting aspect concern conservation and seasonality; but we also append a complete check-list because we hope others will be encouraged to keep similar records, and may wish to compare their findings to ours.

CONSERVATION An individual dam, unless it is very large, only supports a few species at any one time. At Kitothua for example, an average count was about 85 birds of 12 species; there were generally less at the other two dams. Furthermore, only about 11 species bred on or near the dams out of about 99 water-birds that breed in Kenya (Pomeroy 1981). Nevertheless, these dams are important, for at least three reasons.

a) Collectively, all the dams between Nairobi and Thika must support several thousand water-birds. Altogether, we recorded 59 species of water-birds, and doubtless ~~others~~ occur occasionally. So the dams are used by almost a third of the 180 or so species of the non-marine water-birds recorded in Kenya (Pomeroy 1981).

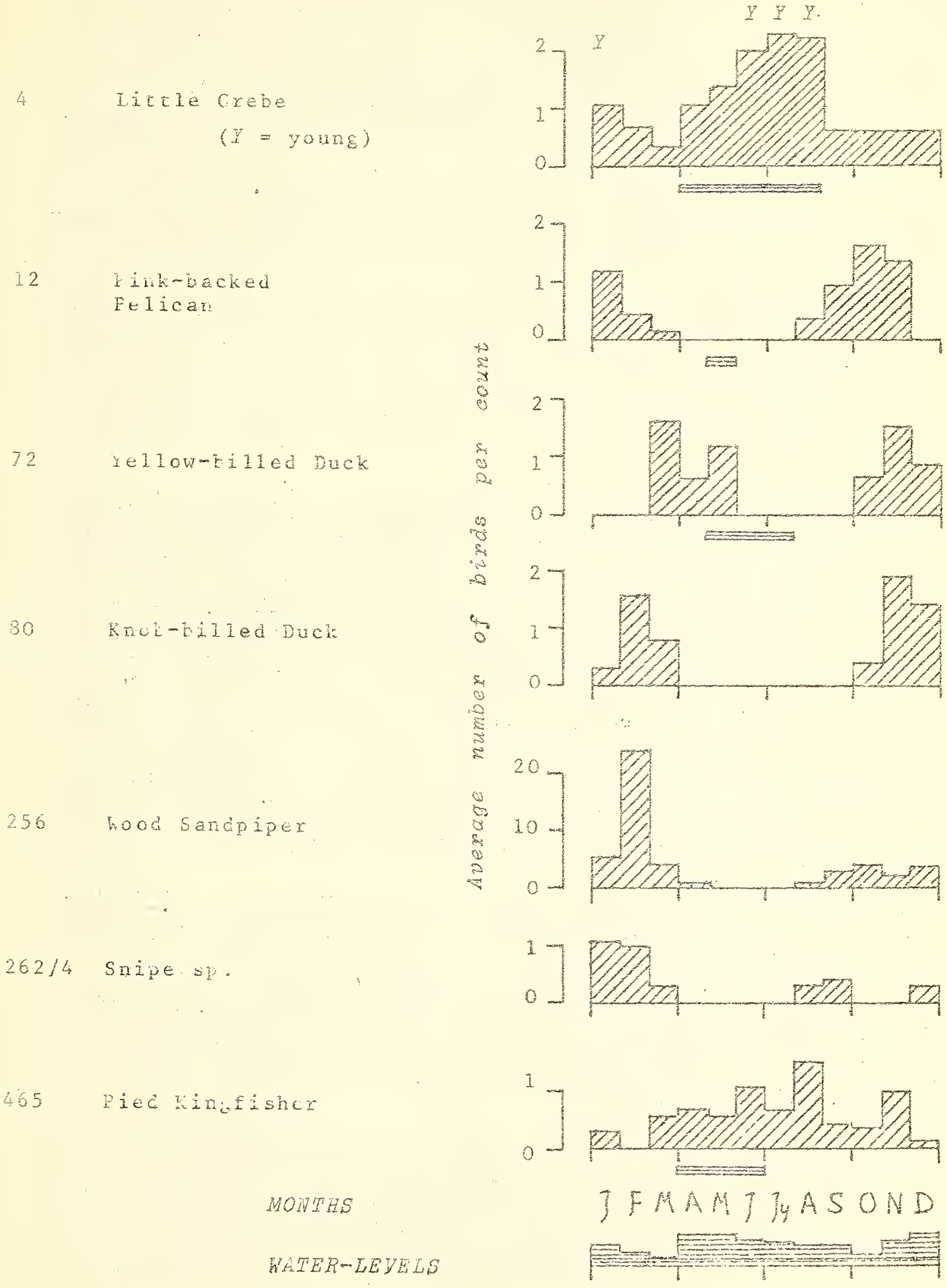
b) Dams are comparatively unstable habitats. They can silt up fairly quickly, or be drained, as happened in our case at Kasarani. At present, their survival in anything like their present state would seem to be largely a matter of chance, especially at a time of rapidly-changing land-use in much of this area. Pollution will almost inevitably increase, and whilst some forms of pollution, such as from coffee waste, can actually increase productivity, other sorts of pollution are well known to be harmful (B.S. Meadows, pers. comm.).

c) Dams add considerably to the diversity and attractiveness of the countryside. Kasarani, before it was drained, was a pleasant place with its covering of flowering lilies. The variety of dams is also important. For instance, Jacanas and White-backed Ducks only frequented the sheltered permanent waters of Kasarani, whilst African Spoonbills and Spur-winged Geese favoured the larger shallow waters of Kitothua.

SEASONALITY There was not a single species whose numbers at the dams remained even approximately constant throughout the year. Several different patterns were recognised. There was a major difference between species with populations resident in the area, and those which were visitors of some kind.

For comparative purposes, we calculated the average number of birds per count for each species on a monthly basis - results of all three dams and all five years being pooled. This method gives a clear picture of seasonal variations, as can be seen in the Figure.

Average monthly counts of seven species to show different types of seasonality. The bars beneath the histograms for the species breeding in Kenya are the main months of egg-laying (from Brown & Britton 1980) (For the Knob-billed Duck there are too few records to indicate its nesting season). At the bottom of the Figure are the average monthly water-levels. Notice the change of scale for the Wood Sandpiper.



A. Resident Species, present for all (or almost all) of the year. This category can be subdivided into :

a) Residents that breed on or near the dams. There are nine such species (at the dams indicated) - Little Grebe (RS), Hamerkop (nearby), Hadada (nearby), Crowned Crane (nearby), Black Crake (KS), Red-knobbed Coot (KS), Jacana (KS), Blacksmith Plover (KT, RS) and African Pied Wagtail (nearby). In addition, the White-backed Duck (KS) and African Moorhen (KS) were suspected of breeding. As an example of a resident, breeding species, the Figure shows average monthly counts of the Little Grebe, and months when young were observed. Notice that its population fluctuates, increasing when water-levels began to drop, and being most numerous at intermediate water-levels.

b) Other residents, not breeding within 10 km of the dams (so far as is known). Four species come into this category: Yellow-billed Egret, Sacred Ibis, Pied Kingfisher and Black-headed Heron (which breeds in Nairobi). The Pied Kingfisher is shown in the Figure, as a representative example. Like many of the other aquatic species, these birds are long-lived and probably have fairly large non-breeding populations.

B. Visitors Three-quarters of all the species recorded were visitors, in the sense that even the commoner ones were not present throughout the year. The immigrants from Europe and Asia (Palearctics) are the most obvious category. But there are others.

a) Palearctic migrants. There are approximately 17 species in this category (two of them could have originated within the Afrotropical Region): they are marked P on the systematic list. Naturally all show peaks of numbers, but the timing of these varies. For example, the Wood Sandpiper, the most numerous Palearctic species, is present in small numbers from late August to early April; so it is a winter resident (see Figure). But a large peak in its numbers in February presumably represents a different group of birds moving north on spring passage. Snipes have never been recorded between April and July, despite apparently suitable conditions, and it seems that the birds were all Common Snipes, the Palearctic species: this was confirmed in the case of a few seen closely. Here there was a small autumn passage in August-September, and a larger spring passage in December-March (see Figure). (Some of the December and January birds may have been winter residents).

b) Afrotropical migrants coming as non-breeding visitors: shown as N on the systematic list. For these species, few or none of the records were during their breeding seasons (as given by Brown & Britton, 1980, for their region D). Eleven species come into this category, of which six were reasonably regular: Pink-backed Pelican, Cattle Egret, Yellow-billed Stork (including immatures), African Spoonbill, Spur-winged Goose (also with immatures) and Three-banded Plover. The Figure shows, as a representative example, the records for the Pink-backed Pelican.

c) Other regular patterns. Several species showed peaks in the wet season. The Figure includes the Yellow-billed Duck as an example; White-faced Whistling Duck and Southern Pochard were others. The highest water levels were just after the rains, and the Red-billed Teal and Malachite Kingfisher were most frequent them. In contrast, the Marabou occurred in significant numbers only in the dry season. Several other species could not be categorized. For example, Knob-billed Ducks had very distinct early-rains peaks (see Figure), but their breeding season is not adequately known, so we cannot say how it relates to the peaks.

d) The remaining nine Afrotropical species were only seen once or twice.

DISCUSSION The Thika road area contains no natural lakes, although the numerous rivers flowing from the Aberdares foothills occasionally flood quite widely as they approach the Athi Plains. Nevertheless, man has enriched the area by the creation of dams, and in total they now support a substantial number of water-birds. The preservation of as many as possible should therefore be encouraged. The main threats are disturbance, drainage, and some types of pollution. The occurrence of the various species is closely realted to the type of dam, which also determines its suitability for breeding. Water plants are probably the most important single feature.

Seasonal movements were evident in all species, and for Afrotropical species were mainly related to their breeding seasons. Fluctuations in water level had a modifying effect in some species. Although about 17 Palearctic species were recorded, the dams supported relatively small numbers of most of them, and cannot be considered of special importance to them.

It is easy to collect the kind of information described here and doing so adds important details to the general picture presented by Britton (1980). Similar studies, in other habitats and in other parts of Kenya, would be a simple and useful way of adding further knowledge. And the creation of major new dams will offer exciting possibilities too. The nearest of these will be one near Fourteen Falls on the Athi River, which will flood back some 30 kilometres, almost to the Nairobi Falls. If managed to encourage suitable margins, this dam could become a major attraction for water birds.

ACKNOWLEDGEMENTS Various people participated in the counts, and their help was valuable. The analysis of the information was assisted by a grant from the East African Wild Life Society. Brian Meadows kindly commented on a draft of the article.

SYSTEMATIC LIST The order followed is that if the "*Birds of East Africa*" (Britton (Ed.) 1980); each species is preceded by its check-list number. The following abbreviations are used.

KS Kasarani dam; KT Kitothua; RS Ruiru Sports Club.
P Palearctic species; N Afrotropical species for which all or most records are in the species' non-breeding area.
Actual dates are given when a species was recorded only once.

4	Little Grebe *Tachybaptus ruficollis*	Resident, breeds (see Figure)
12	Pink-backed Pelican *Pelicanus rufescens*	N; max 12 at KT in October (see Figure)
17	Long-tailed Cormorant *Phalacrocorax africanus*	Mainly at KS, max 12 in February; absent April - July

25	Grey Heron *Ardea cinerea*	N: KT, November and December
26	Goliath Heron *A. goliath*	KT, one on 14th February 81
27	Black-headed Heron *A. melanocephala*	Resident, recorded mainly as singles in all months except July, August and October
28	Purple Heron *A. purpurea*	N, uncommon
30	Squacco Heron *Ardeola ralloides*	N, regular, mainly KS and RS
32	Cattle Egret *Bubulcus ibis*	N, occurs throughout year but uncommon April-July, the main breeding season. Most numerous August-November
34	Great White Egret *Egretta alba*	KS, one on 15th February 80
36	Little Egret *E. garzetta*	N: KT, January and April
38	Yellow-billed Egret *E. intermedia*	Resident, especially at KT: peak November
42	Hamerkop *Scopus umbretta*	Resident, peak July-October
47	Black Stork *Ciconia nigra*	P: one at KT on 7th March 81
49	Marabou *Leptopilos crumeniferus*	Only visits dams in January-March and September-October; max ca. 250, October
50	Yellow-billed Stork *Mycteria ibis*	N: manily January and August-October, max 14, October, KT
51	Hadada *Bostrychia hagedash*	Resident, breeds locally. Numbers increase progressively February-June, leading to July max. Groups of more than 20 recorded April, July, December
53	Glossy Ibis *Plegadis falcinellus*	KT, one on 29th November 79
54	Sacred Ibis *Threskiornis aethiopica*	Resident, with peak numbers October-November. Max 20, KS, October
55	African Spoonbill *Platalea alba*	N: mainly July-November; max 11, October, KT
60	White-faced Whistling Duck *Dendrocygna viduata*	Mainly April and October-December (wet season): max 12, October, KS
61	Egyptian Goose *Alopochen aegypiacus*	2 at RS on 15th October 80
(62	Pintail *Anas acuta*	P: a flock of 78 at KT on 2nd January 82 was after regular observation ceased)

66	Red-billed Teal *A. erythrorhynchos*	Regular when dams full; max 8, KS, December
67	Hottentot Teal *A. hotentota*	2 at RS on 23rd November 80
69	Garganey *A. querquedula*	P: occasionally at KS, February
70	African Black Duck *A. sparsa*	Occasional at KS, October and December
72	Yellow-billed Duck *A. undulata*	Appears early in rains, before water levels are high, and peaks in wet season (see Figure) Max 10 at KS, March; 10 at KT, November
76	Southern Pochard *Netta erythrophthalma*	Another wet season visitor, but in smaller numbers: max 4 at KS, December
79	Spur-winged Goose *Plectopterus gambensis*	N: a marked peak in November (max 38, at KT) and smaller peak in February-March. Immatures twice recorded in November
80	Knob-billed Goose *Sarkidiornis melanotos*	Peaks in November and February (see Figure). Max 8 at KS
82	White-backed Duck *Thalassornis leuconotus*	Resident in small numbers at KS (max 11 in February) and may have bred there
93	Pallid Harrier *Circus macrourus*	P: one at KT on 22nd September 79
95	African Marsh Harrier *C. ranivorus*	One at KT on 29th August 78
137	Fish Eagle *Haliaeetus vocifer*	Occasional, June and August
194	Crowned Crane *Balearica pavonina*	Resident, breeds locally and visits dams occasionally throughout year, usually in pairs
199	Common Moorhen *Gallinula chloropus*	Resident, seen at KS throughout the year and probably bred there. One record for KT
201	Black Crake *Limnocorax flavirostra*	Resident, and recorded all dams and often along streams as well. Breeds
215	Red-knobbed Coot *Fulica cristata*	Not recorded in April-August, the main breeding season; however it bred at KS at least twice, small young being seen in March and December. Max 12 at KT, December
225	Jacana *Actophilornis africanus*	Two pairs resident at KS; young seen December-March; also September

231	Little Ringed Plover *Charadrius dubius*	P: 4 at RS on 3rd January 81
233	Ringed Plover *C. hiaticula*	P: parties of up to 10, October-March
239	Three-banded Plover *C. tricollaris*	N: commonest after the rains, July-September and December-February
243	Blacksmith Plover *Vanellus armatus*	Resident, breeds locally; young recorded September-November. Scarce or absent in May-June
252	Common Sandpiper *Actitis hypoleucos*	P: present in small numbers for much of year (earliest 19th July, latest 19th March): peaks in November and February
255	Spotted Redshank *Tringa erythropus*	P: 2 at KT on 15th November 80
256	Wood Sandpiper *T. glareola*	P: common and sometimes abundant, especially February (see Figure; max 115, KS in February). Earliest 3rd August, latest 8th April
257	Greenshank *T. nebularia*	P: present from August (earliest 26th) to March (latest 19th), with marked peak February (max 15)
258	Green Sandpiper *T. ochropus*	P: usually as singles (but max 7); earliest 31st August, latest 17th March. It is also found along streams
259	Marsh Sandpiper *T. stagnatilis*	P: flock of 15 at KS, 19th February 81
262/4	Snipe sp	(?P): all records are between August (earliest 3rd) and March (to 11th) - see Figure - hence most if not all likely to be 262 Common Snipe
272	Little Stint *Calidris minuta*	P: frequent from August (earliest 26th) to March (latest 7th), with distinct peaks October and January-February. Max 10, October
279	Ruff *Philomachus pugnax*	P: occasional, December-April; max ca. 70, January, KT
282	Black-winged Stilt *Himantopus himantopus*	(?P): recorded only between October and February, mainly singles
331	African Skimmer *Rhynchops flavirostris*	N: singles in October and November
465	Pied Kingfisher *Ceryle rudis*	Resident in small numbers (but not recorded February - see Figure). Often follows streams from one dam to another

466	Malachite Kingfisher *Alcedo cristata*	Singles in all months except January, but commonest at times of high water (May-July-December)
991	African Pied Wagtail *Motacilla aguimp*	Resident, breeds locally, but seen at dams between January and May
996	Yellow Wagtail *M. flava*	P: flocks of up to ca. 20 from October (earliest 29th) to March (latest 17th)

REFERENCES

Britton, P.L. (Ed.) 1980 *Birds of East Africa*. EANHS, Nairobi

Brown, L. & Britton, P.L. 1980 *The Breeding Seasons of East African Birds*. EANHS, Nairobi

Pomeroy, D.E. 1981 Composition of Kenya's avifauna. *EANHS Bulletin*, 1981, 30-31

D.E. Pomeroy and B. Tengecho, Dept. of Zoology,
Kenyatta University College, P.O. Box 43844,
NAIROBI

AN AGGRESSIVE AUGUR BUZZARD

When I lived on Kacharoba Tea Estate in Upper Kiambu, Kenya, I was constantly dive-bombed by a white Augur Buzzard, *Buteo augur*. We had a pair in residence, a smaller black one and this bigger white one which frequently dived on me. The following are the dates and details :

8.4.81 The white Augur Buzzard dived at me several times whilst I was walking down a small path through the tea. Could he (she) think my hair, which is a dark brown with auburn lights, was a mole ?

During April and May 1981 this bird dived at me several times when the sun was shining on my hair ! Often the Superb Starlings would give me a warning with a shriek or two. If I turned my face towards the Augur he would not press home his dive.

29.7.81 Dive-bombed again by the white bird, again on 3.8.81.
25.8.81 Dive bombed three times, turning and coming at me over and over again.
14.9.81 Repeated bombing, swooping down very close to the top of my head.
4.3.82 Dive bombed several times whilst I was giving the other birds bread
14.3.82 Again bombed by the Augur Buzzard.
3.4.82 Augur came winging down at me.
15.5.82 Saw both Augurs high in the trees. I was walking in the vegetable garden when suddenly the white bird swooped just over my head frightening a few birds. He was actually below me when he did his upward and away flight. He did give me quite a fright !
26.5.82 The Augur bombing me again, skimming just over my head.

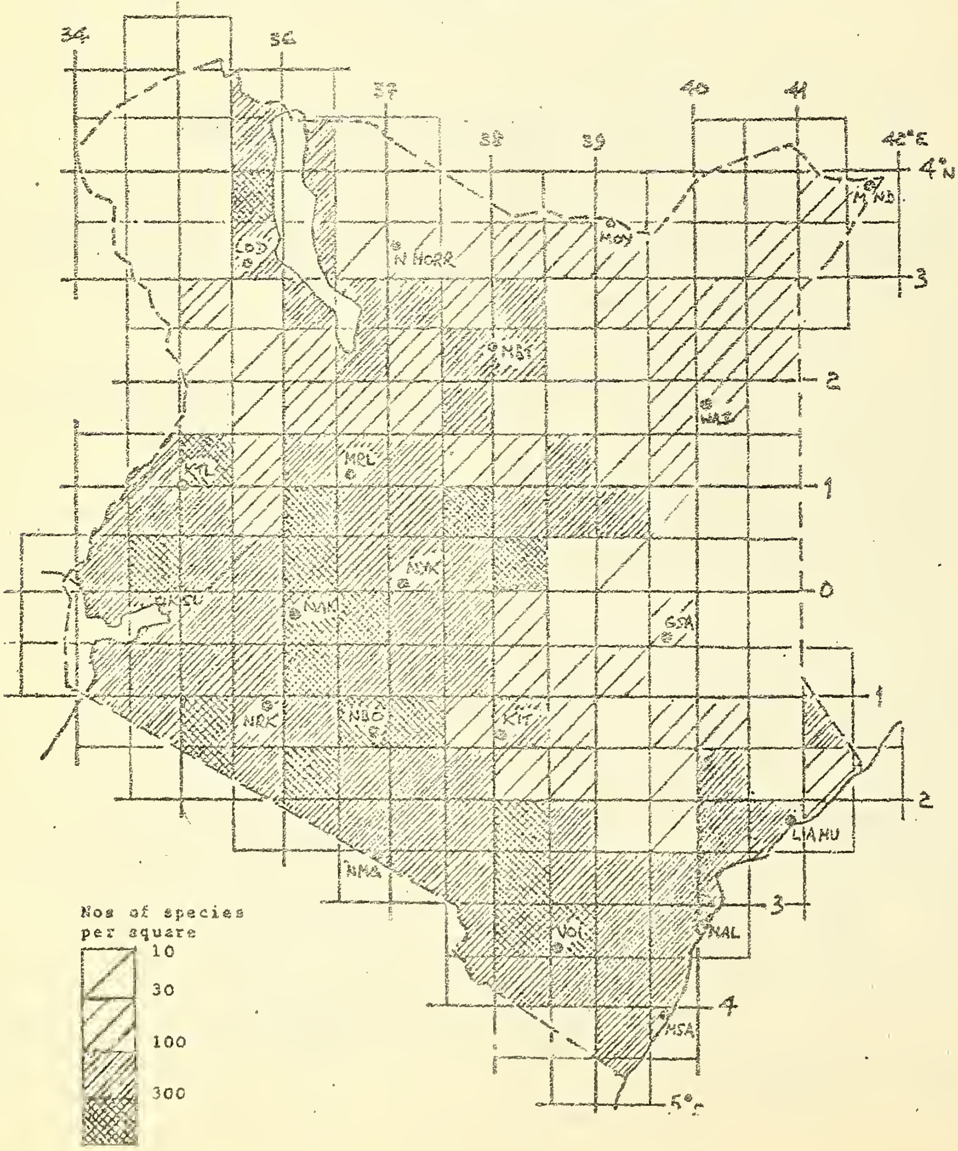
Sadly we left Kacharoba on the 6th June 1982. I have seen both black and white Augur Buzzards flying over our new cottage in Rosslyn, but neither have come down to buzz me !

Mavis Heath, P.O. Box 714, LIMURU

A BIRD ATLAS FOR KENYA: FURTHER PROGRESS

Since our introductory article (EANHS Bulletin pp. 64-70, 1982), the Kenya bird atlas scheme has made great progress; this has been facilitated by the excellent response to our requests for various sorts of data, both from members of the EANHS and the Kenya Museum Society. Thus we would like to begin by thanking everyone who is helping in any way with the project, and by asking for their continued support; we also gratefully acknowledge a grant of KShs. 11,221 from the EANHS to fund aspects of the scheme.

FIGURE 1. Progress in mapping; the numbers of species recorded in each square as at August 1982.


34
35
36
37
38
39
40
41
42°E
4°N
3
2
1
0
1
2
3
4
5°S
LOD
N HORR
MOY
MND
MBT
WAJ
KTL
MRL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
LAMU
NMA
VOI
MAL
MSA
Nos of species per square
10
30
100
300

A major step in the project has been the transfer of the 26,000 + data points accumulated so far from the atlas files to a set of maps that were funded by a part of the EANHS grant. Thus we now have a distribution map for each of the 1,056 species that occur/have occured in Kenya. The data shown on these maps are both intriguing and interpretable, and the final phase of the exercise, the interpretation of these maps and the writing of a short summary for each species, will begin in the near future. Amongst other sources, this interpretation will use a series of transparent map overlays compiled by DEP, comparable to those provided by the British Trust for Ornithology for use with J.T.R. Sharrock's _Atlas of Breeding Birds in Britain and Ireland_ (London: T. & A.D. Poyser; 1976). This set of overlays shows the variations of such things as altitude, moisture index and rainfall in Kenya, together with various types of surface waters and indigenous forest. By superimposing these in turn on a species map, the correlation of any of these factors with the species' distribution can readily be assessed.

However, we must stress that, despite the above-mentioned studies, _we shall continue to collect records until at least September 1983, so please don't be deterred from sending further records and lists._

The EANHS _Bulletin_ contains a mass of useful information on birds;indeed, the appalling and quite unimaginable proposition that it sometimes contains too much bird material had from time to time tended to rise, phoenix-like (another bird reference !) from our fevered minds. Aside from these spasms of heresy, there remains the fact that the extraction of the _Bulletin's_ information on any species or group can be a long and tedious process, particularly if the information is contained within an article with a more general title. Thus, as a slightly seperate branch of the atlas exercise, Miss P.M. Allen has nearly completed a bird index for the _Bulletin_, going back to 1970, which lists the year and page reference for _every mention of every bird species_. As well as greatly facilitating the transfer of the _Bulletin's_ data to the atlas maps, this index will be indispensable as a rapid reference to the whole of the _Bulletin's_ information on any species. When completed, this index will be available for members' use.

Further maps

Figure 1 is a progress map, showing the numbers of bird species so far recorded by the atlas for all of the quarter square degrees in Kenya; 98 of these squares now have lists of over 100 species. Ideally, in the later stages of the project, all squares should have lists of 100+, even in the very dry areas, so that there is ample room for improvement - so get to those unwatched squares !

The other four squares are further examples of species distribution maps. Whereas the scheme's final maps will distinguish between probable and confirmed breeding, and between pre- and post- 1970 records, all breeding records in these examples are shown by a single symbol, for simplification.

Figure 2 shows the distribution of the Crowned Eagle, _Stephanoaetus coronatus_, which inhabits forested and wooded areas, including riverine forest. Breeding is mainly

FIGURE 2. Recorded distribution of Crowned Eagle

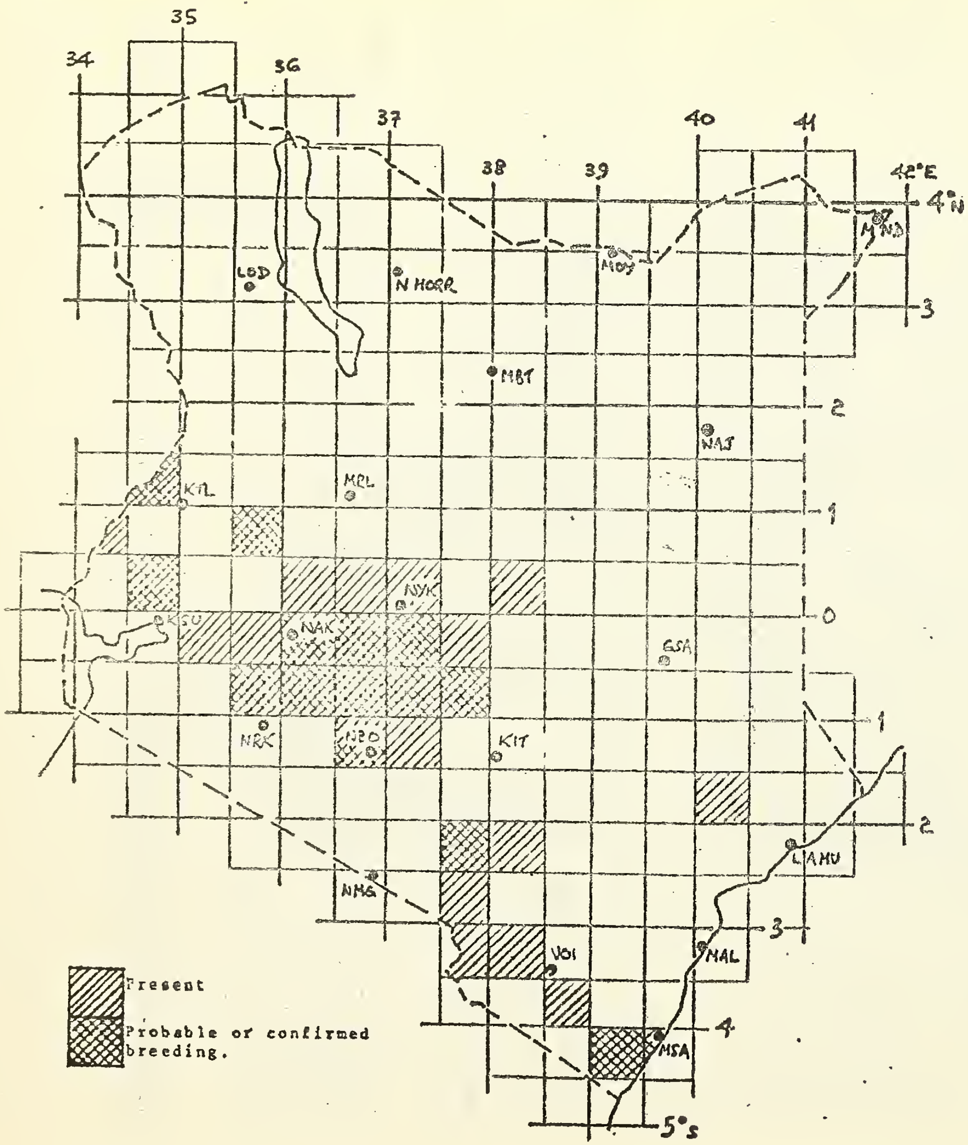
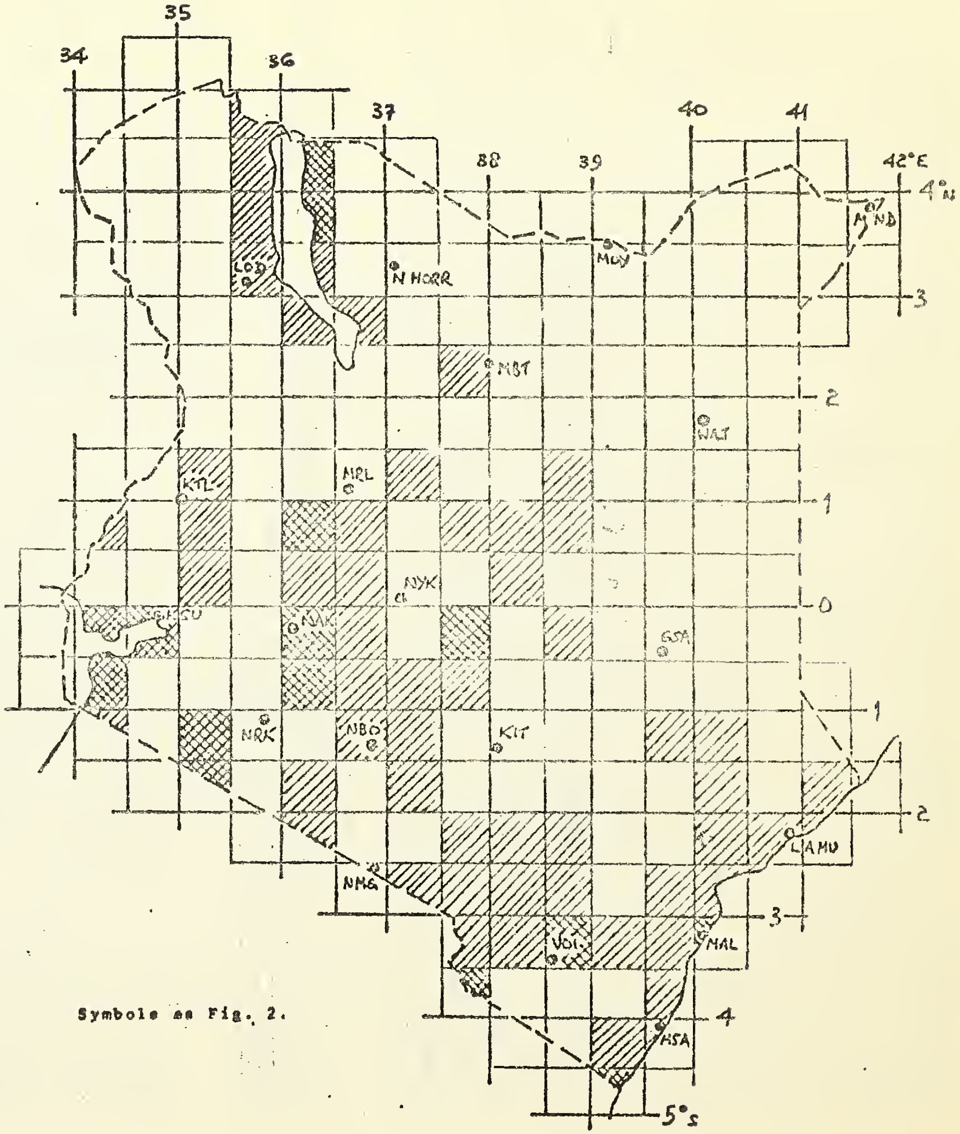

34
35
36
37
38
39
40
41
42°E
4°N
3
2
1
0
1
2
3
4
5°S
LOD
N HORR
MOY
MND
MBT
NAJ
KTL
MRL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
NMG
LAMU
VOI
MAL
MSA
▨ Present
▩ Probable or confirmed breeding.

FIGURE 3. Recorded distribution of Fish-Eagle


34
35
36
37
38
39
40
41
42°E
4°N
3
2
1
0
1
2
3
4
5°S
LOD
N HORR
MOY
MND
MBT
NAJ
KTL
MRL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
NMG
LAMU
VOI
MAL
MSA

Symbols as Fig. 2.

restricted to areas over 100 metres in altitude. The equal numbers of breeding and presence records suggest a resident breeding bird that wanders only relatively small distances from its breeding areas; more of these presence records may well be upgraded to breeding as further data is collected. Note the bird's presence in the riverine forests of the Tana River Primate Reserve, and the series of records running northwest from the coastal forests near Mombasa, up through the Shimba Hills forests, Mt Kasigau, the Taita Hills, the Kitovu-Lake Chala area, the Chyulu Hills and the Kibwezi groundwater forest, to the riverine woodland around the Athi in the Bushwhacker's Camp area. Then the forests of the Nguruman escarpment, to the south of Narok, and the main concentration of breeding in the central highlands which is fringed, particularly on the norther edge of the highlands, by the presence records of birds wandering from the breeding sites.

Figure 3 shows the distribution of the Fish Eagle, Haliaeetus vocifer, which naturally reflects the presence of large open waters - rivers, lakes, the sea - of any salinity that contain fish. Since the nests of this species are large and readily visible, our coverage of the breeding areas may well be fairly comprehensive. If this is the case, the paucity of breeding records at the coast is noteworthy. Furthermore, while this species is recorded in 71 of the map squares, only 15 of these show breeding, which suggests that these birds breed in relatively few, specialised areas, but then disperse much more generally afterwards. This situation directly contrasts with the Crowned Eagle (Fig. 2), which tends to wander far less from its breeding quarters.

Figure 4 shows two shrikes, the Grey-backed Fiscal, Lanius excubitorius and the Long-tailed Fiscal, L. cabanisi. These are shown together as an example of allopatry (the occupying of mutually exclusive ranges) by closely related species. They are members of a superspecies, that is they are considered to have evolved from a common species ancestor, and they are both co-operative breeders; in addition, they are both large and noisy birds that habitually raise and lower, and wave pendulum-fashion, their almost disproportionately long tails. The Grey-backed mainly inhabits areas categorised as 'sub-humid' by the moisture index, between altitudes of 1,000 and 2,000 metres. It is mainly a bird of western Kenya, extending eastwards to the Rift between Naivasha and Baringo, and to restricted areas of the eastern plateau. The Long-tailed replaces the Grey-backed to the southeast of the latter's range, in mainly drier country. Using the rainfall and moisture index overlays, the Long-tailed is found to range from areas with over 250 mm annual rainfall to definitely 'semi-arid' but not 'arid' areas: hence note its range from the southern edge of the highlands, southeastwards in the moist zone parallel to the Tanzania border, and then along the moist coastal strip. The Long-tailed also has a much greater altitudinal range than its congener, from sea-level to over 2,000 metres.

While conscious of a certain lowering of the tone of the whole enterprise by so doing, we nonetheless found ourselves incapable of resisting the temptation to insert a competition: NAME THE SPECIES SHOWN IN FIGURE 5 ! The first three correct

FIGURE 4. Recorded distributions of Grey-backed and Long-tailed Fiscals (see key)

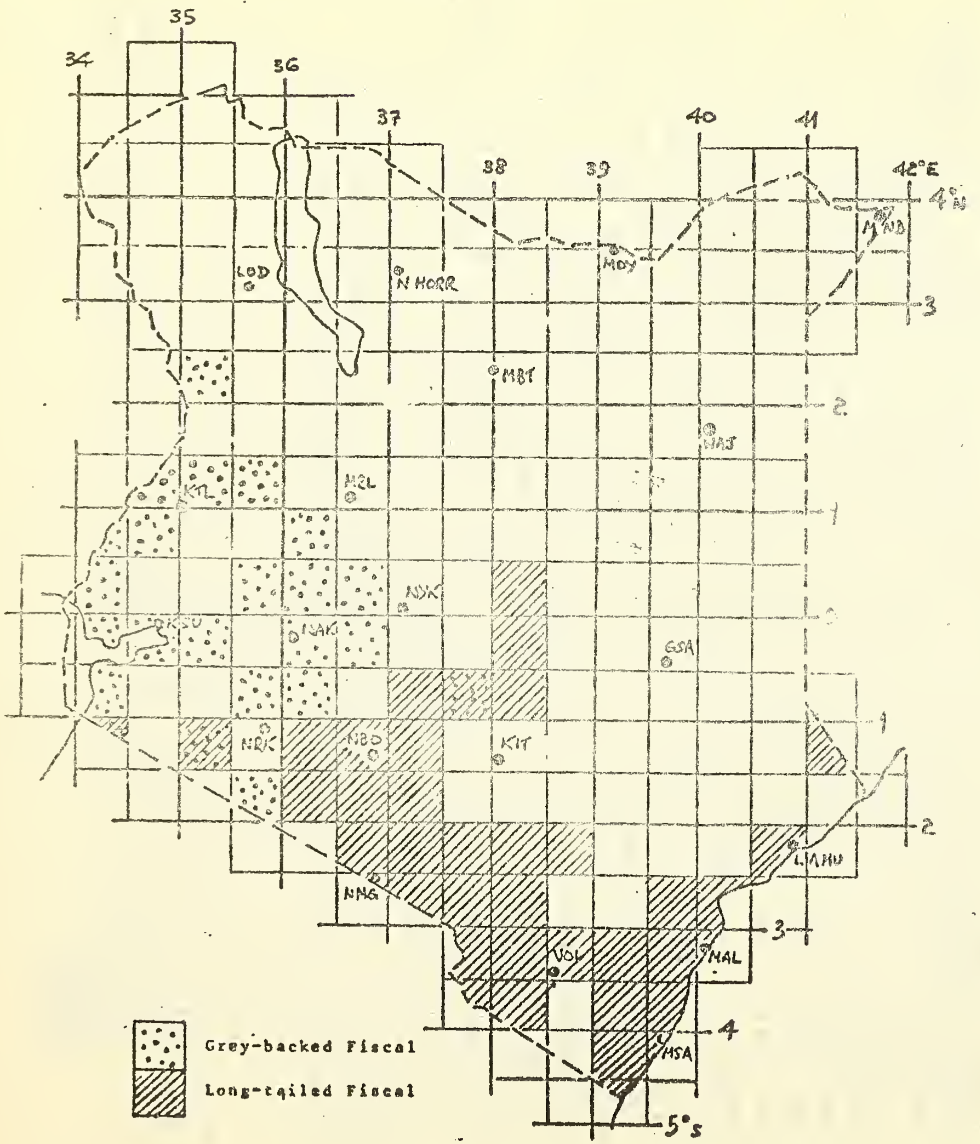
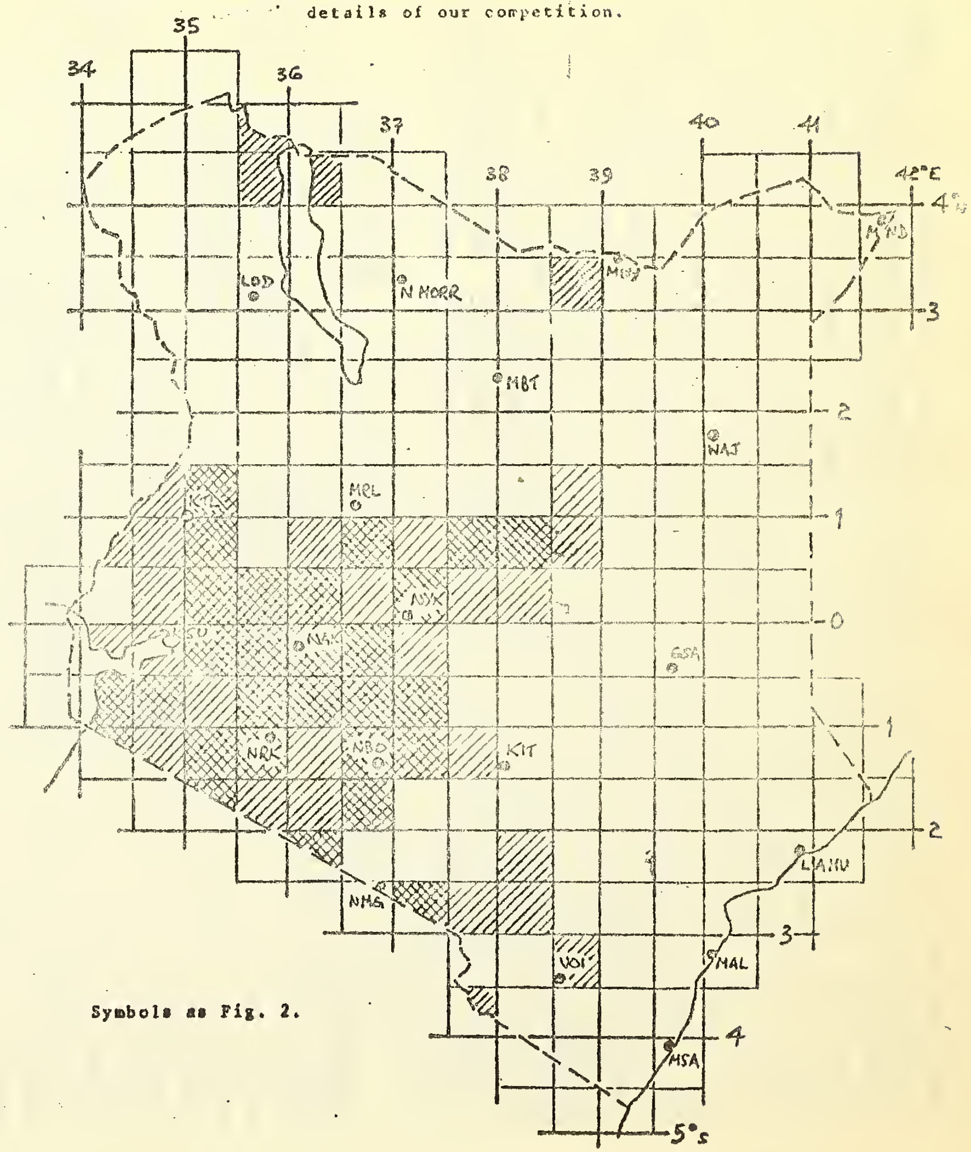

34
35
36
37
38
39
40
41
42°E
4°N
3
2
1
0
1
2
3
4
5°S
LOD
N HORR
MOY
M'ND
MBT
NAJ
MRL
KTL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
LAMU
NNG
VOI
MAL
MSA
Grey-backed Fiscal
Long-tailed Fiscal

FIGURE 5. What species does this show? See text for details of our competition.


34
35
36
37
38
39
40
41
42°E
4°N
3
2
1
0
1
2
3
4
5°S
LOD
N HORR
MOY
M'ND
MBT
NAJ
MRL
KTL
NYK
KSU
NAK
GSA
NRK
NBO
KIT
LAMU
NNG
VOI
MAL
MSA

Symbols as Fig. 2.

answers to ADL will receive three, two and one free copies of the EANHS' Ornithological Sub-Committee's Check List of the Birds of Kenya respectively, with the winners and other correct entries announced in the next issue of the Bulletin. STOP PRESS: having just read what I've typed, just this instant, it emerges that members living any distance from Nairobi will thus be at a distinct disadvantage: for not only will they be able to hasten their entries, in person, to my door, but since they receive their Bulletins later than local residents, they will be non-starters from the start. Thus, moved by a sense that everyone should have a fair chance to make a complete fool of themselves or not, as the case may be, ADL will store all entries for six weeks after the Bulletin's publication, and then pick entries from a sack, or should the response be low, a small paper bag, until three correct answers are achieved. Howzat ? Furthermore, feeling as we are just a touch generous, we can divulge that Fig. 5 shows a common and well known bird, and that it is not, repeat not, a Cisticola (which one of us feels not only to be an error of judgement but also, not to put too fine a point on it, a downright disgrace.).

Requests for information

We require post-1970 records for the following species/ phenomena; all correspondence please to ADL: everything will be answered and acknowledged. All localities mentioned are shown on the Kenya Route Map (publ. by the Survey of Kenya, and widely available) :-

1) Yellow-billed Duck *Anas undulata* from any part of Lake Victoria in Kenya.

2) African Pygmy Goose *Nettapus auritus* from South Nyanza, the Winam Gulf of Lake Victoria, or Siaya District.

3) Any records of any vulture from one degree squares 49 (Kapsabet, Nandi Hills, Eldama Ravine, Eldoret, Kabarnet, Tambach, Moi's Bridge, Chebiemit, the Kerio Valley); 64 (the Thika-Garissa road from Mwingi to Ndeyini Pool, Kora reserve, the southern end of Meru National Park); 65 (the Tana from Kora reserve to Nanigi East, Garissa, the Thika-Hagadera road between Bangali and 50 km northeast of Garissa); 77 (Kitui, Mt Endau, Mutomo); 78 (Bura and just west of Hola on the Tana, and the dry country west of the Tana). For more precise location of these one degree squares (including latitude and longitude), see the map in the first article.

4) Any breeding records of Jackson's Francolin *Francolinus jacksoni* from quarter square degrees 63a (My Kenya, Naro Moru, Mountain Lodge, Karatina, Castle and Irangi Forest Stations) or 63b (Chogoria, Chuka, Runyenjes, the eastern slopes of Mt Kenya).

5) the Silvery-cheeked Hornbill *Bycanistes brevis* is a common and prominent bird to those of us in Nairobi, and also at the coast, yet on compiling the atlas map for this species we were surprised to find a complete lack of breeding records. Since then, a 1965 record of sucessful breeding at Molo, right on the western edge of the bird's Kenya range, has come to light (J. & H. Start, EANHS Bulletin pp 125-127, 1978), but we still lack anything post-70. Thus anything on breeding very welcome.

Adrian D. Lewis, Geology, P.O. Box 30197, NAIROBI
Derek E. Pomeroy, Zoology, P.O. Box 43844, NAIROBI

WARNING TO CAMPERS AT SAMBURU

I feel that Society members should be warned about the hazards of camping in the Buffalo Springs Game Reserve. Whilst camping on Champagne Ridge with my family, we were robbed during the night of 23rd July of all our camera equipment, binoculars, all our clothing and a miscellaneous collection of cooking utensils and food.

Upon reporting to Isiolo Police Station, I was informed that this was the seventh incident at that camp site reported to Police in the space of only two months.

Such a security situation is, in my opinion, appalling and I consider the Game Department's failure to warn us gross negligence.

Dr S.T. Avery, P.O. Box 30020, NAIROBI

CAMP HYGIENE

Many of us enjoy the camps organised for us, and they are one of the best features of membership. However, the less pleasant feature of the camps are the litter, and even worse the faeces often seen in the surrounding bush after a camp. I suspect the offenders are new arrivals from developed countries where sanitary facilities are usually provided in camp sites and resort to the bush is seldom necessary.

The standard procedure is to equip oneself with a digging tool, the most satisfactory being the entrenching tool, available in Nairobi shops. This will also serve to dig you out of the mud and other useful purposes. In lieu of this a panga will serve.

Dig a hole at least a foot deep, and after performing, return the soil and tamp down well. Leave as little evidence of your presence as possible.

The same applies to camp litter and in particular tins. Do not leave these as burnt out hulks in the camp fire ashes as they never disintergrate. Bury them deep in a pit and cover up.

Many of our camps are held on private land, and to leave rubbish and filth uncovered is not only unhygienic but also a discourtesy to the host. Most of us old timers were taught all this in our early days out here, but perhaps the tuition is not supplied these days to new-comers - hence the need for this article.

Tom Grumbley, P.O. Box 200, KIAMBU

NOTICE TO ANYONE INTERESTED IN BIRDS

Are you a birdwatcher/photographer/ringer newly arrived in Kenya, and in search of details of local birds, good areas to visit, relevant literature and ringing and other research schemes ? Contact Adrian D. Lewis (Geology, P.O. Box 30197, NAIROBI) for information.

THE KENYA ASTRONOMICAL SOCIETY

The Kenya Astronomical Society meets for lectures and field meetings at 6.15 p.m. on the first Thursday of every month. The present venue (the French School in Argwings Kodhek Road) will be changed in October to Brookhouse School, Magadi Road. EANHS members are welcome to pay a trial visit. The Hon. Secretary is Hugh Cowie, P.O. Box 15569, telephone 891499, Nairobi.

INFORMATION WANTED

Dr Jonathan Kingdon is in Kenya to make a little film about "looking at animals", "form and function" and all that. He would like to film at really close quarters the Silvery-cheeked Hornbill, *Bycanistes brevis*. Any member in the Nairobi area who has hornbills which are a) predictably resident in September and b) reasonably tame, or anyone who has free-flying tame ones or released captives is asked to leave the information with Mr G.R. Cunningham-van Someren in the Bird Room at the National Museum, Box 40658, phone 742161, as soon as possible.

BOOKS WANTED

Wanted: one copy of Dale & Greenway's *Kenya Trees and Shrubs*
one copy of Agnew's *Upland Kenya Wild Flowers*
Please contact Dr Eric Reynolds, Small Ruminant CRSP,
Ministry of Livestock Development, P.O. Box 58137, NAIROBI

THANKS

A big thank you to the following members who so kindly gave their time to help with collating and dispatching the last *Bulletin* :

Lise and Tim Campbell
Yvonne Malcolm Coe
Mrs Birnie
Mrs Kroll
Mr Ken Burton

SOCIETY NOTES

Check List of the Birds of Kenya Do you have your copy of the EANHS Ornithological Sub-Committee's Check List yet ? Available from the office at Shs 10/- each.

Birds of East Africa again produced by the Society's Ornithological Sub-Committee, this most useful books is available from the office at Shs 130/- each.

Some Wild Flowering Plants of Ethiopia We have a few copies of this small book on the flowering plants of Ethiopia at Shs 30/- each. Please contact the Secretary.

Journal Reprints A new reprint list is being produced and will be sent to members. In the mean time, do call into the office at the National Museum and see what is available.

Out of Print Africana Books We have some Africana books for sale - please ask for a list of those available. Any member wishing to sell books should contact the Secretary; the Society takes 10% of the selling price.

Christmas Presents Are you shopping early for Christmas and looking for some unusual gift ? Try the Society first, we have some weird and wonderful things for sale!!

Car Stickers are still in stock at only Shs 2/- each.

Informal Notes are also available, sets of 12 cards and envelopes, air mail weight for Shs 10/- per set.

Birds of the African Rain Forest, sets of two long-playing records of the forest birds, beautifully recorded, for only Shs 90/- per set.

Places to Visit So not one of our members has been to a camp or self service lodge ! No response to our request in the last Bulletin ! Please put pen to paper and let us have a few details on interesting places to stay, giving some detail on roads, types of accommodation etc.

Thanks to Mrs Rudnai, Mrs Brass and Mrs Watts for their help in checking copies of Birds of East Africa. Any member with a little spare time who would like to do a useful job for us, please call in at the office - we can always find something for you to do !

Bulletin copy always needed, so please send to The Editor, P.O. Box 44486, Nairobi, your notes and records on any natural history subject.

SOCIETY FUNCTIONS CONTINUED FROM PAGE 96

Naro Moru River Lodge (see page 96) If you want to take advantage of this offer to spend a couple of days in lovely surroundings at the foot of Mt Kenya only 106 miles from Nairobi, please fill in the enclosed form and return it with full payment by a crossed cheque made out to Naro Moru River Lodge Ltd, to Mrs A.L. Campbell, P.O. Box 14469, Nairobi, with a seperate reply paid self addressed envelope. Further information will be sent with the voucher at the beginning of November.

Sunday 28th November 1982 Fifth Annual Nairobi Bird Census. Members wishing to take part in the Society's Nairobi Bird Census should please fill in the enclosed form and return it before 1st November to the Secretary, P.O. Box 44486, Nairobi, or drop it off at the Society's office. More details in the next Bulletin.

December 10th - 13th/14th 1982 Field trip to Ol Lolokwe: Leaders Mr and Mrs Tom Grumbley. Details later.

Sunday 12th December 1982 Please note that there will be no official unofficial day trip !

Friday 7th January 1983 at 7 p.m. The famous ornithologist and author, Mr James A. Hancock, will give an illustrated lecture on 'Herons Around the World'. PLEASE MAKE A NOTE OF THIS SPECIAL LECTURE, WHICH WILL BE HELD IN THE LEAKEY MEMORIAL HALL IN CONJUNCTION WITH THE KENYA MUSEUM SOCIETY.

Wednesday Morning Bird Walks - meet Museum 8.45 a.m.

Society Lodge Weekends If members who have booked accommodation for our discount lodge weekends find a day or two before that they are unable to attend, could they please endeavour to inform the Functions Organiser, Mrs Campbell, or the Secretary, Dennie Angwin on 742131 ex 14. On the last trip to Naivasha two groups were unable to participate and if we had been told, their rooms could have been utilized by others.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Iona L. Andrews, P.O. Box 57009, NAIROBI
Dr and Mrs S.T. Avery, P.O. Box 30020, NAIROBI
Ms Francoise Belmont, UNEP, P.O. Box 47074, NAIROBI
Ms S. Brunton-Rose, P.O. Box 67553, NAIROBI
Mr J.R. Davis, 'Ontulele', P.O. Box 61, NANYUKI, Kenya
Mrs S. Deverell, P.O. Box 40111, NAIROBI
Rev and Mrs K.L. Downing, A.I.C. Nyakach, P.O. Box 53, SONDU, Kisumu, Kenya
Mrs Kathy Eldon, P.O. Box 53441, NAIROBI
Mrs Joan Goodhart, P.O. Box 444, MALINDI, Kenya
Mrs Rosalind Hillyar, P.O. Box 44, NAIVASHA, Kenya
David N. Mbungu, University College of Eastern Africa, P.O. Box 2500, ELDORET, Kenya
Mr A.F. Nicholson, P.O. Box 67780, NAIROBI
Steven M. Ogilvie, P.O. Box 57009, NAIROBI
Mr Harry Remnant, Ibonia Estate, P.O. Box 25, KIAMBU, Kenya
Dr Eric Reynolds, SR-CRSP. Ministry of Livestock Development, P.O. Box 58137, NAIROBI
Miss W. Robinson, P.O. Box 30125, NAIROBI
C. Roffey, P.O. Box 14571, NAIROBI
Mr Sabi, P.O. Box 48506, NAIROBI
Mr Stephen Taylor, P.O. Box 30017, NAIROBI
Miss Erica Tromp, P.O. Box 48600, NAIROBI
Dr David Western, P.O. Box 48177, NAIROBI
Mr and Mrs B. Wettke, P.O. Box 30035, NAIROBI
Mr and Mrs A.G.D. White, Australian High Commission, P.O. Box 30360, NAIROBI
Mrs C.R. Wood, P.O. Box 24490, NAIROBI

Local Junior Members

T.N. Kaminjo, Tana House, Nairobi School, P.O. Box 30047, NAIROBI
W.P. Waudo, Tana House, Nairobi School, P.O. Box 30047, NAIROBI

Change of Status to Life Membership

Mr Anders Hoff, Baldersvagen 4, S-223-56, LUND, Sweden
Mr McCormick, Box 85226, EMMARENTIA 2029, Transvaal, South Africa

SOCIETY FUNCTIONS

Sunday 12th September 1982 Informal day trip. Please meet at the National Museum at 9 a.m. prepared for a day in the 'bush' and bring with you ideas on where you would like to go, walking shoes and a picnic lunch.

Monday 13th September 1982 in the Museum Hall, Nairobi at 5.30 p.m., Mr Nathaniel arap Chumo, Director of the Wildlife Clubs of Kenya, will give an illustrated lecture on the work of the Clubs in furthering the interest in conservation.

Sunday 26th September 1982 Day trip to Limuru. Please meet at the National Museum at 9 a.m. sharp, bringing a picnic lunch if you wish to stay all day.

October 8th - 10th 1982 Week-end camping at Eserian Farm by kind invitation of Mr and Mrs Carnegie. The camp will be about 60 km west of Nyeri. Birdwatching and botanising and walking in the lovely countryside. Members will need full camping equipment, food and water for their party as well as petrol for the return journey to Nyeri and a possibility of a drive into the Aberdare Mountains - weather permitting. Members wishing to take part in this excursion should please fill in the enclosed slip and return it as soon as possible with a self addressed stamped envelope to Mrs A.L. Campbell, P.O. Box 14469, NAIROBI.

Sunday 10th October 1982 Informal day trip. Please meet at the National Museum at 9 a.m. prepared for a day in the 'bush' and bring with you ideas of where you would like to go, walking shoes and a picnic lunch.

Monday 11th October 1982 in the Museum Hall, Nairobi at 5.30 p.m. Dr Adrian Lewis of the Geology Department, University of Nairobi will give an illustrated lecture on 'Eastern Views: Pictures from Africa and Arabia'.

Sunday 17th October 1982 Informal day trip with a difference ! We have been kindly offered the use of the grounds of the Mason's Rift Valley Lodge at Lake Naivasha. Please meet at the Lodge, take the South Lake Road, drive past the Lake Naivasha Hotel, past the next fenced farm and turn into the entrance marked by a sign saying R.V.L. Please identify yourselves with your EANHS membership card.

23rd - 27th October 1982 The Tsavo Walking Tour is now fully booked.

Monday 8th November 1982 in the Museum Hall, Nairobi at 5.30 p.m. Dr Charles Dewhurst of the Desert Locust Control Organisation of East Africa will give an illustrated lecture on 'The African Army Worm'.

Sunday 14th November 1982 Informal Day trip. Meet at the Museum at 9 a.m.

November 19th, 20th and 21st 1982 Special Society discount at Naro Moru River Lodge for any or all of the dates stated and adjoining dates. Full board: Adults Shs 340/- double per night, shs 255/- single per night, triple Shs 465/- per night, children sharing parent's room Shs 55/- per night (age 2 - 6 years); age 7 - 12 years Shs 105/- per night. These rates are dependant on bookings of 20 members or more.

CONTINUED ON PAGE 94 - MORE DETAILS ON NARO MORU AND MORE DATES !

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., M.E.J. Gore, Miss S. Karmali
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Mrs. C. Taylor
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton (**Editor EANHS Bulletin**), Mrs. J. Hayes, Dr. A.D. Lewis, D.A. Turner
Co-opted Members: P.B. Taylor (Nest Record Scheme Organizer), Mrs. F. Ng'weno, S. Njuguna, Dr. D. Pearson, D.K. Richards, Mrs. P. Wootton, P. Davey
Journal Editorial Sub-Committee : M.E.J. Gore, Miss Karmali
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E. Pomeroy, D.K. Richards, T. Stevenson, P.B. Taylor, Dr. K. Howell, J. Beesley, N. Baker, (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds, P.L. Britton (United Kingdom)
Joint Library Sub-Committee : (Society representatives) Mrs. C. Taylor, M.P. Clifton.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
NH

EANHS

BULLETIN

A publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 4 shillings.

CONTENTS

Observations on Bird Articles in the Bulletin.. 98
Possible Widespread Misidentification of Canaries
Serinus in Kenya 101
Hammerkops Mating 103
Larder Tree 104
Further Notes on Cisticolas 104
Use of the 'Bird Atlas for Kenya' Data for Ecological
Studies 105
Comedy of Squirrels 110
Society Weedend at Fishermens Camp, Naivasha 110
Requests for Information 112
Society's Bird Migration Fund 112
Notice to Anyone Interested in Birds 112
Request for Slides for Wildlife Clubs of Kenya 113
Back Copy of Bulletin Required.. 113
Wanted 113
For Sale 113
Specialized Education Services 114
Hunter's Lodge and Club 114
Society Notes 114
New Members 115
Society Functions 116

OBSERVATIONS ON BIRD ARTICLES IN THE BULLETIN

In an effort to help with the Bird Atlas, I recently undertook to go through the Bulletin, more or less page by page, from its commencement in the last half of 1971 to the end of last year, searching for records of birds. It was an interesting exercise and I thought fellow members might be interested in some of the points I noticed.

The Bulletin is not a specialist journal nor a learned journal. It is intended for the ordinary members and reflects their tastes and interests in a way that a more selective periodical would not do. Nor is it entirely about birds. There are occasional complaints that birds occupy more than their share of space, to which my reply has always been that if students of other groups never see anything interesting or important to which they would like to draw the attention of fellow members, they have no one to blame but themselves. However, it becomes obvious why birds are the most suitable objects of study for the more casual naturalists. Their grace and beauty and likeness in many ways to ourselves make an instant appeal to our feelings. They have English names that are becoming more and more standardised, and there are not so many of them but that anyone of normal intelligence can learn to recognise the dozen or so species that frequent the garden or yard or even the verandah of the flat and the provision of a mere dish of water will soon increase their numbers.

Many of us would rather look at lions or elephants, but how seldom do we get the chance ! Other creatures, perhaps particularly plants and insects, are of marvellous beauty and endless interest but their study is dauntingly complicated. In most cases the object of study has to be killed, which some of us find repellant, and the resultant collections take up more room than we can spare.

So it is no wonder that birds are the most popular objects of study for many of our members, though it cannot be said that other subjects have been neglected, as all from shellfish to larger mammals have found their writers in the Bulletin.

Let me turn then to the records of birds that I have noticed there. Of course a glance at the Atlas, particularly at the stage it had reached when I began this work, will show us that it is not so much the distribution of birds that is being mapped as the distribution of bird-watchers. Birds are everywhere, and where there are observers they will be noticed and recorded. It is bird-watchers rather than birds that are extending their range. With the spread of tourist roads and lodges, places that a short time ago could only be reached by a complicated safari are now available for week-end trips. So birds seem to extend their range as people go who notice them. I understand that our Society is trying to correct this bias by encouraging competent observers to visit the more inaccessible and less popular parts of the country.

However there is no doubt that new species are being seen, even in well-watched areas. An example is the Black-headed Gull, *Larus ridibundus*, whose appearance is recorded in the Bulletin four times up to 1976. Surely if it had been common in the Nairobi National Park, not to mention the ponds in Uhuru Park, where I was advised by my friends to go and see it, and I did, it would have been noticed before. Others, rare or non existant in certain places are now more often seen. Many years ago I saw a Pigmy Kingfisher, Ispidina picta, in the Arboretum in Nairobi. I was quite certain, but I said nothing about it, as I was sure nobody would believe me, and I did not wish to be told by all my friends, one after the other, that what I had seen was the Malachite, Alcedo cristata. Now of course, its name occurs in every census list. But if someone asked me where he should go to see the Pigmy Kingfisher, the Arboretum is not the first place I should suggest.

But let me return to my first reflections on the Bulletin, which will be as I explained, more about bird watchers than birds. During this work I collected observations on about 700 species (at a rough guess) and they come from all over the country and from bird watchers of every standard "dedicated and casual" (to quote an American advertisement), "learned and lewd" (to quote Mallory). As one would expect, non-passerines attract much more attention than passerines, and there are favourites. Flamingoes and Pelicans are often mentioned, Herons and Storks attract a good deal of attention, especially the Marabou, Leptopilos crumeniferus, (mentioned 12 times). Ducks attract curiously little, the favourite being the Egyptian Goose, Alopochen aegyptiacus which I found mentioned 12 times.

Birds of prey attract less attention than one would expect and there are odd gaps. I found no mention on our own Long-crested Eagle, Lophaetus occipitalis, until I found its name in the list of the 1978 bird census. Of course, observations of breeding and behaviour are more interesting for the Bulletin than mere sight records, and usually all that we see of the Long-crested Eagle is one soaring overhead or sitting high up in a tall tree. It does not seem often to nest in our gardens or do anything much to attract attention to itself. Favourites in this group are the Tawny Eagle, Aquila rapax, mentioned 13 times, the Steppe Eagle, A. nipalensis (7 times) and the Black Kite, Milvus migrans, (12 times). Here I am reminded of Jackson's note on the "African Kite" (M.m. parasitus) "It is beyond doubt fearless, graceful and good to look at....". That whole note is well worth reading (Birds of Kenya Colony and Uganda Protectorate, Vol. 1 p. 168).

One rather odd series of observations is that of the Palm-nut Vulture, Gypohierax angolensis. It is mentioned 5 times up to 1973 and never again. What happened ? Did it disappear, or did observers lose interest in it ?

Without a doubt the groups that attracted most attention during the '70's, especially from the more skilful observers was the Plovers and Waders. I think this may be due to the greater accesibility of the further Rift Valley lakes, Bogoria, Baringo and even Turkana, as Lake Nakuru has not been at its best during this period. It was a time when the Broad-billed Sandpiper, Limicola falcinellus, seemed to have been extending its range and attracting attention. I found 6 mentions of it up to 1976 and many of the other waders were only mentioned incidentally, in connection with it. Another that seemed to be extending its range is the Spotted Redshank, Tringa erythopus which attracted much attention and was mentioned 15 times.

When we come to the non-passerines, less interest is expressed both in groups and indivisual species, but again there are favourites. After the first year or so I saw that both the Ringing records and the Nest Record Scheme would be gone through seperately, so I omitted any of those that were reported in the *Bulletin*. Even so, I found the Eurasian Swallow, *Hirundo rustica*, mentioned 18 times, but other migrants did not attract much attention. Among Warblers the Apalis group was noted 18 times among 8 species but of the others most had only one note each, except the Blackcap, *Sylvia atricapilla* (6 mentions) and Chiffchaff, *Phylloscopus collybita* of which I found 6 mentions. Among resident species the Pied Wagtail, *Motacilla aguimp* is a general favourite, mentioned 10 times including some very interesting observations. Another favourite is the Common Bulbul, *Pycnonotus barbatus*, mentioned 12 times which Moreau speaks of as "this pushful species" so unlike its relations which are mostly so secretive, though I was surprised that the Zanzibar Sombre Greenbul, *Andropadus importunus*, to my mind a conspicuous and attractive species, was not mentioned more often. I found it mentioned only 3 times.

Robin Chats are mentioned 33 times among 7 species. Thrushes and Wheatears also attracted a good deal of attention. Flycatchers are popular, especially the Paradise, *Terpsiphone viridis*, mentioned 10 times, and the White-eyed Slaty, *Melaenornis chocolatina*, mentioned 8 times. Starlings of course are popular, especially the more conspicuous species. The Superb, *Spreo superbus* I found mentioned 12 times. Sunbirds attracted more attention than any other family, particularly the Bronze, *Nectarinia kilimensis*, mentioned 10 times, the Collared, *Anthreptes collaris*, 9 times and the Amethyst, *N. amethystina*, 10 times.

The attractive but elusive and puzzling little White-eyes, Zosteropidae, get 8 entries between 3 species. Coming now to the seed-eaters, I found few individual species with more than 6 mentions. The Baglafecht Weaver, *Ploceus baglafecht*, was mentioned 11 times and the Grey-headed Sparrow, *Passer griseus* 13 times, but there are big collections of what used to be considered seperate species. Of the other Weavers, Holubs Golden, *P. xanthops* was the only one mentioned as many as 8 times. The aggressive little Pin-tailed Whydah was mentioned 7 times, the Red-billed Fire-finch, *Lagonosticta senegala* 8 times, the Bronze Mannikin, *Lonchura cucullata*, 9 times, the Thick-billed Seed-eater, *Serinus burtoni* 7 times and the Streaky Seed-eater *S. striolatus* 9 times. All these are common birds, which pleased me.

I am a founder member of the Ethiopian Wild Life and Natural History Society, and I always tried to impress on our new members the importance and interest of common birds. I know that R.T. Peterson says that seeing rare birds is the spice of bird watching, but few of us ever see rarities and fewer still are primed to recognise them if they stood in front of us, whereas the common bird is always there, full of interest and information. On a mountain road going up and down (as they do in Ethiopia) you pass constantly from places where the Fiscal, *Lanius collaris* is dominant to places where the Grey-backed Fiscal, *L. excubatorius*, takes its place. What other corresponding changes does one notice at the same time ? On another road you stop seeing the familiar Pied Crow, *Corvus albus*, and start seeing the 'Somali Crow' (*Corvus ruficollis* to us, perhaps *C. corax* to them). When does this happen and what happens when they intergrade ? Alas, only too often on a long journey we are in too much of a hurry that we cannot make proper observations. On one journey on a steep and twisting mountain road Leslie Brown indirectly struck terror into the hearts of my passengers by suggesting that I should count the Lammergeyers, Gypaetus barbatus, we saw. How fortunate we were ! I am now very lame and rather blind, but I have no need to go to Hell's Gate. I have seen the Lammergeyer 'for ever', "sub specieaeternitatis".

Priscilla Allen, P.O. Box 14166, NAIROBI

POSSIBLE WIDESPREAD MISIDENTIFICATION OF CANARIES SERINUS IN KENYA

Many times I've been wrong and this may well be another time, but it does appear to me that the Yellow-fronted Canary, Serinus mozambicus, (hereafter referred to as Y-f C) is not only absent from the Nairobi area, but also from all or much of the Kenya plateau to the east of the rift, with the exception of the coastal strip. Now that may not appear a startling revelation at first or indeed subsequent sights, and it may even achieve a profound ennui in those for whom canaries in general are somewhere in limbo just left of 'small brown birds', or perhaps are only seen in cages. But it might be startling to, for example, John Williams, who, in Vol. II of his appalling guides (1972), lists the species from Marsabit, Meru and Lake Nakuru National Parks, and Samburu National Reserve. And numerous other observers, including members of the Society's ornithological sub-committee and contributors to the Kenya bird atlas scheme, might have to think again. So, admitting right from the start that I could be quite wrong on this, lets examine the facts.

Firstly, the standard reference books, Jackson (1938), White (1963), Hall & Moreau (1970) and Britton (1980) all put it where I feel it should be, in the moister habitats of western and coastal Kenya. But whereas Britton (op. cit.) describes the range of the race S.m. barbatus as "W Kenya from Mt Elgon to Nandi, Kakamega, Siaya and Sotik", Mackworth-Praed & Grant (1960) place this race in "central and eastern Kenya Colony", and illustrate it as an unbroken corridoe from the eastern shores of Lake Victoria eastwards to the coast. Could MPG's map be incorrect, or is it all around us ?

If these standard texts are to some extent undecided, has anyone actually seen it, recently, in the disputed areas ? Well, needless to say, I haven't, and neither has Dave Pearson, despite being prompted to scrutinise every available canary (so how do you get your kicks ?) by the growing feeling of a mass-produced error; other members of the Society's ornithological sub-committee are uncertain. A very competent local bird-watcher has withdrawn his records for Baringo, Samburu, Nairobi, Thika and Naivasha after hearing the arguments presented here: this decision is supported by the fact that Terry Stevenson does not list the species in his very informative Birds of Lake Baringo (1980). If the species has ever occured in the Nairobi-Ukambani area, one might expect someone to have taken a shot at it, at least in the early days of prolific collecting around the Uganda railway, so that the resultant specimens might turn up in the collection of the

National Museum: but this collection only contains material from western and coastal Kenya.

The EANHS/Kenya Museum Society Wednesday birdwalk regularly scours (or is that scourges?) the Nairobi area but has only one recorded Y-f C, at a locality where the species was observed breeding a couple of years back. But the egg that was collected from this nest (not, I might add, by the birdwalk) more resembles that of the White-bellied Canary, S. dorsostroatus (Mackworth-Praed & Grant op. cit.; National Museum egg collection), of which more later.

But people are seeing the birds in the disputed areas, NOW. The EANHS Annual Nairobi Bird Census recorded 1, 2 and 9 Y-f C individuals in its first three years, but none in 1981, and several contributors to the Kenya bird atlas (OK, OK, no names) have recorded it from Nairobi, Mt Kenya, the Ark, Nakuru, Baringo etc etc.

So assuming that they are seeing some sort of canary, as opposed to a pale yellowish, poorly marked, small female weaver for example, what could they be looking at ? Are there any possible confusion species ? The answer to that is a firm 'yes', and I believe that these other, very similar birds (possibly helped along by Williams' (op. cit.) lists, Mackworth-Praed & Grant's (op. cit.) distribution map, and by the rather poor general quality of available illustrations) may be the source of the error.

The White-bellied Canary (W-b C) extends over much of the Kenya plateau, but is a 'drier' bird than Y-f C. It is common in pairs or small numbers in the drier parts of Nairobi, including Embakasi Ranch and the southern end of the National Park; Stevenson (op. cit.) records it at Baringo. Although it does have a diagnostic white belly (and vent) as its name suggests, this is shown rather reduced in Williams (op. cit). Apart from this white belly, it possesses the characteristics of Y-f C :- bright yellow forehead and stripe over eye; thin dark moustachial stripe (though not so thin or really black as that of Y-f C) on a yellow face; prominent yellow rump, best seen in flight. Mackworth-Praed & Grant (op. cit) and Hall and Moreau (op. cit.) actually comment on the similarity between these two species in such features as overall size, shape, type and size of bill, face pattern and general colour, and confusion between them certainly seems to have occured in the case of the Nairobu breeding record.

The Brimstone Canary, S. sulphuratus, (BC)is a bird of moister areas like Y-f C, and occurs in Kenya throughout the Lake Victoria basin and across the western and central highlands (Britton op. cit.), being common in small numbers around Nairobi. This is a distinctly larger bird than Y-f C or W-b C, with a heavier, stouter bill. It is much greener above, with the rump yellow-green as opposed to bright yellow. But again, it is a typical yellow canary with some yellow (though less than the other two species) on the forehead and a prominent yellow stripe over the eye, and with a thin darkish moustache stripe on a yellow face (though this moustache is paler and more diffuse than the thin black line of Y-f C). Of W-b C and BC, the former much more resembles Y-f C, but I feel that confusion could also occur over the latter, particularly by less experienced observers; the extension of BC down through southeast Kenya to the coast (shown by the Kenya bird atlas and still to be investigated) may reflect this confusion.

So there we are. Needless to say, I'll be most interested in any comment on this, and I must stress that the views expressed here are tentative, not dogmatic. Records from any of the areas mentioned, together with Namanga-Maparasha Hills (an area where Y-f C might occur) should be supported by a full description; I'm not generally in favour of taking eggs or specimens, but they would, like the Nairobi egg, be useful in this difficult case.

So stare at those canaries !

Acknowledgements To various people for discussion and notes, and for the provision of the egg, and to G.R. Cunningham-van Someren for access to texts at the National Museum, Nairobi.

References

Britton, P.L. (ed.) 1980. Birds of East Africa their habitat, status and distribution. Nairobi: EANHS.

Jackson, F.J. 1938. The Birds of Kenya Colony and Uganda Protectorate. 3 vols. London: Gurney & Jackson.

Hall, B.P. & Moreau, R.E. 1970. An Atlas of Speciation in African Passerine Birds. London: British Museum (Nat. Hist.)

Mackworth-Praed, C.W. & Grant, C.H.B. African Handbook of Birds. Series 1. Birds of Eastern and North Eastern Africa. 2nd. edition. London: Longmans Green & Co.

Stevenson, T. 1980 The Birds of Lake Baringo. Nairobi: Sealpoint Publicity.

White, C.M.N. 1963 A Revised Checklist of African Flycatchers, Tits etc. Lusaka: Government Printer.

Williams, J.G. 1972. A Field Guide to the National Parks of East Africa. Fourth impression. London: Collins.

Adrian D Lewis, Geology, P.O. Box 30197, NAIROBI

HAMMERKOPS MATING

On the morning of 6th March, 1982 I witnessed an unusual scene. At 06.55 hrs, four Hammerkops, *Scopus umbretta*, landed on the roof of our house in Nairobi. They were making a terribly loud noise, so I went out to check and saw four of them standing on the roof. Then one of them, most probably the male, mounted the female bird, flapping his wings vigorously to control himself without falling down, and then dismounted. He then stood in front of the female and cried out loudly with a very high pitched, piercing voice. The female then took wing and the other three birds followed amid their loud cries.

Has any other member witnessed these birds mating ?

Pritpal Soorae, P.O. Box 44919, NAIROBI

LARDER TREE

At the time of writing I have in my garden at Loresho in Nairobi a very unusual Acacia tree. It is in flower - nothing unusual about that - except amongst its pretty pom pom flowers are a number of odd objects delicately skewered on to the tree's thorns.

At this mornings count these objects consisted of nine pieces of bacon fat, three pieces of toast, one piece of sponge cake and three fat caterpillars. (Type of caterpillar is unknown, but all are fat and juicy and one is still alive and wriggling although well skewered on a thorn).

The Acacia has only recently produced these objects which are to be found on the upperside of the branches usually a metre or so above ground. The cause of these skewered objects? The answer is the garden's resident Fiscal, *Lanius collaris*. As soon as food is put on the bird table the shrike commutes the five metres from table to tree with the best bits of food, skewers them on the thorns, and then spends a good part of the day chasing away from the Acacia any other bird which dares to approach his "larder".

If nothing is put on the bird table then the shrike turns to caterpillar hunting and spikes these on the tree. The shrike does eat the skewered food but at his leisure during the course of a day.

Mrs M. Sinclair, P.O. Box 30158, NAIROBI

FURTHER NOTES ON CISTICOLAS

Subsequent to my recent summaries of Cisticolas (EANHS *Bulletin* 108-114, 1981 and 2-9, 1982), the following further information (all nomenclature as in my articles) :-

1) CARRUTHERS' CISTICOLA

whereas I attributed the description of the song of this species to my own observations (p. 30, 1982), it is in fact derived from Britton (1978); apologies for this error. Furthermore, the features of the immature plumage were in fact described by Britton (1970) :- crown light brown, as opposed to the characteristic chestnut crown of the adult; mantle light brown, finely streaked with dark brown and hardly contrasting with the crown, as opposed to the great contrast between the unstreaked chestnut crown and the thickly streaked mantle of the adult; ventral torso as the adult, but with a slight yellowish wash, especially on the breast; the characteristic wing and tail patterns of the adult bird are also found in the immatures.

The following points were noted during a week's trip to Siaya District in June 1982; the area, between Luanda and Akala, consists of mixed scrub and shambas, with numerous shallow, wide river valleys (and is an *excellent* one in which to see many of the truely western species of Kenya) :-

2) RED-FACED CISTICOLA

this species was numerous and breeding, and four distinct calls were noted. The commonest of these was the characteristic whip-like 'chip-wip' which I've already described. Then there was a thin 'seeep.....seeep.....seeep', which was uttered from high (c 2.5m above ground level) perches, and which appeared to be an alarm call; this compares with the 'wheeep' call that I described without comment. Thirdly, there was a call given occasionally that sounded extremely like the shrill squeaking of the female Yellow-breasted Apalis, Apalis flavida flavocincta.

Finally there was a song flight, in which a bird circled over its territory with a slow, butterfly-like flight, at a height of about 6m, uttering a loud version of the 'chip-wpi' call, with a chuckling 'chicker-chucker-chucker' tagged on to the end. This was only seen once, at about 5 pm on a hot afternoon, and appears to be unrecorded/very unusual. My generalisations on the "large and unstreaked" Cisticolas include the point that they all sing from perches (p 110, 1981), while neither Lynes, Mackworth-Praed & Grant nor Roberts (references given on p 114, 1981) give any mention of a song flight for RED-FACED. This slow flight over the presumed territory was probably some sort of display associated with the breeding season, or possibly an alarm.

3) SIFFLING CISTICOLA

having only heard this species in song once, in Nairobi National Park, I tentatively recorded my impressions of its call (p 9, 1982). However, this bird is also common and breeding all over the shambas and scrub, and the frequent hearing of the call, most of the time, every day, enables me to confirm the description. The noise is soft and lisping, but continually repeated and far-carrying, and detection of the bird is simply a matter of scanning the tops of nearby trees and tall bushes for the small, unobtrusive, motionless speck of its presence.

References

Britton, P.L. 1970. The immature plumage of two African warblers. Bulletin of the British Ornithologists' Club 90: 26-28.

" " 1978. Seasonality, density and diversity of birds of a papyrus swamp in western Kenya. Ibis 120: 450-466.

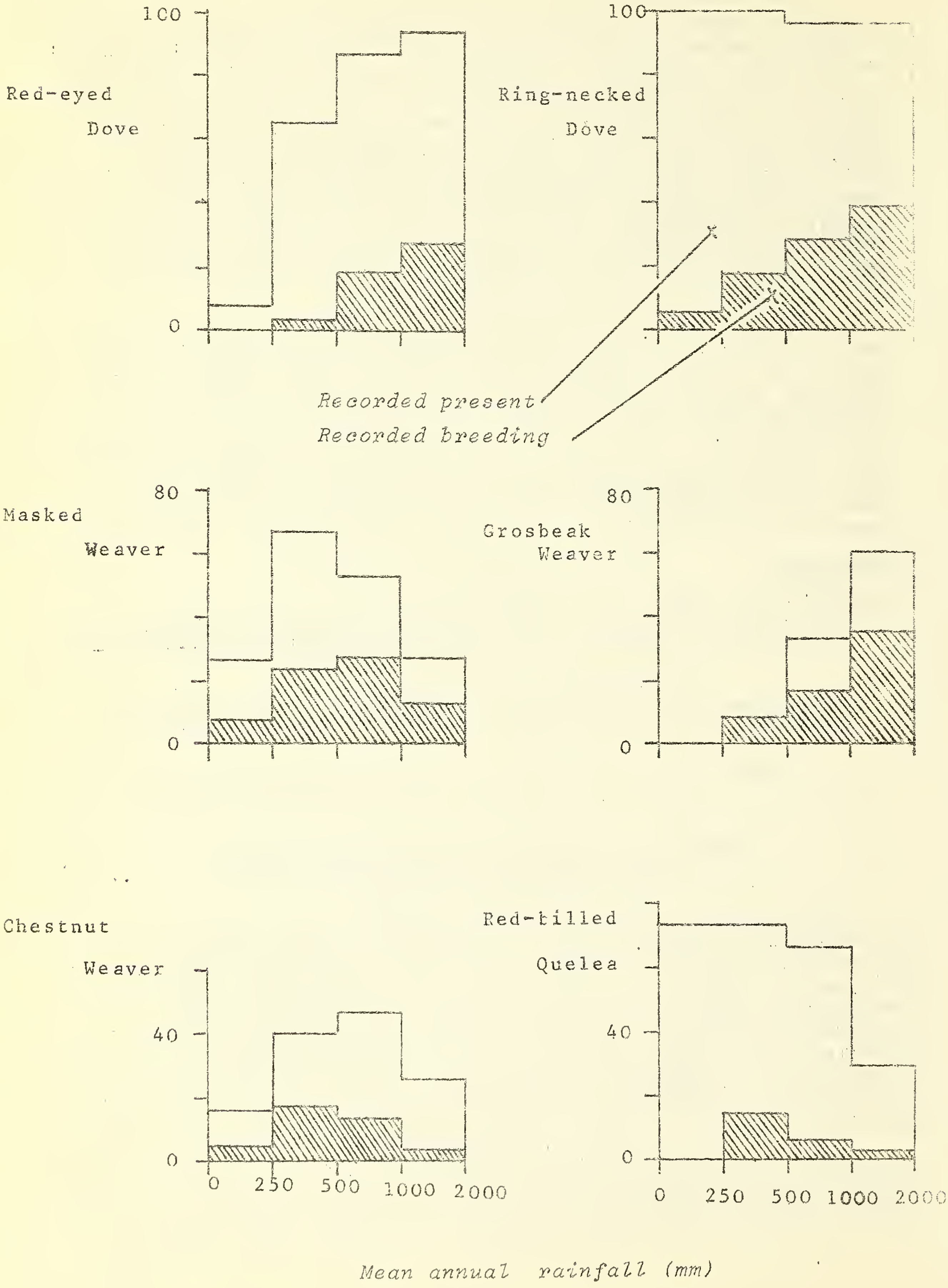
Adrian D. Lewis, Geology, P.O. Box 30197, NAIROBI

USE OF THE 'BIRD ATLAS FOR KENYA' DATA FOR ECOLOGICAL STUDIES

With nearly 30,000 records already entered on maps, it is possible to make preliminary analyses of some of the data. Up to early September 1982, there were 135 squares (out of 230, many of which are part squares around the national boundaries) for which at least 30 species of birds had been recorded, and these are the ones used in this study. The species we are concerned with are all conspicuous, and there is a good probability of their being seen, if present, in any square with 30 records. The criterion is arbitary, but will serve the present purpose, which is only a preliminary exercise.

We have prepared overlays showing altitude, rainfall and a moisture index, and others showing the distribution of various aquatic and forest habitats in Kenya. For this article we have used the overlays for rainfall and moisture,

FIGURE 1. Distribution of six species in relation to rainfall. The species here are all pests of dryland farming areas. *The vertical scale shows the percentage occurrence.*



to illustrate how birds' distributions can be correlated with climate; and we have taken as examples two contrasting groups of birds. The first group are six important pest species in the drier areas of Kenya, while the second group contains the five Kenya species of Fiscal shrikes (genus *Lanius*).

1. Bird Pests - their distribution related to rainfall

Figure 1 shows the distribution in Kenya of six species which, at times, are moderate or serious pests on smallholder farms near Bushwhackers Camp (Masalani), Machakos District (Gichuki 1982). This is a rather dry area, with an average annual rainfall just below 500 mm.

For each species, we placed the transparent overlay over the provisional atlas map of its distribution, and counted how many squares it has been recorded in, for each of the four levels of rainfall: less than 250, 250-500, 500-1000, and over 1000 mm a year. Then we expressed the figures as percentages of the number of squares the species could have been recorded in. For example, the Red-eyed Dove, *Streptopelia semitorquata*, has been recorded in 22 of the 35 squares (ie 63%) which (a) have an average annual rainfall between 250 and 500 mm a year, and (b) have had 30 species or more recorded in them. But the Dove had only been recorded breeding in one of those 35 squares (3%). The figures of 3 and 63% are the ones plotted in Figure 1 for Red-eyed Dove in the 250 - 500 mm category.

Looking at Figure 1, several interesting points emerge. Firstly, with one exception, each species has an optimal region of rainfall. The exception is the Ring-necked Dove, *S. capicola* - the universal dove - which occurs in almost every square. But even the Ring-necked Dove breeds in more of the wetter squares, and the frequency of breeding records drops to a very low level in the driest parts of Kenya. Although this trend is likely to be accentuated by the distribution of observers, it is real nonetheless, because in other species there are other patterns. Thus for both Chestnut Weaver, *Ploceus rubiginosus* and Red-billed Quelea, *Quelea quelea*, the frequency of breeding records increases with decreasing rainfall, except for the driest areas where the absence of records probably does reflect the lack of observers, although areas with less than 250 mm of rain really are dry, and do not support many breeding species.

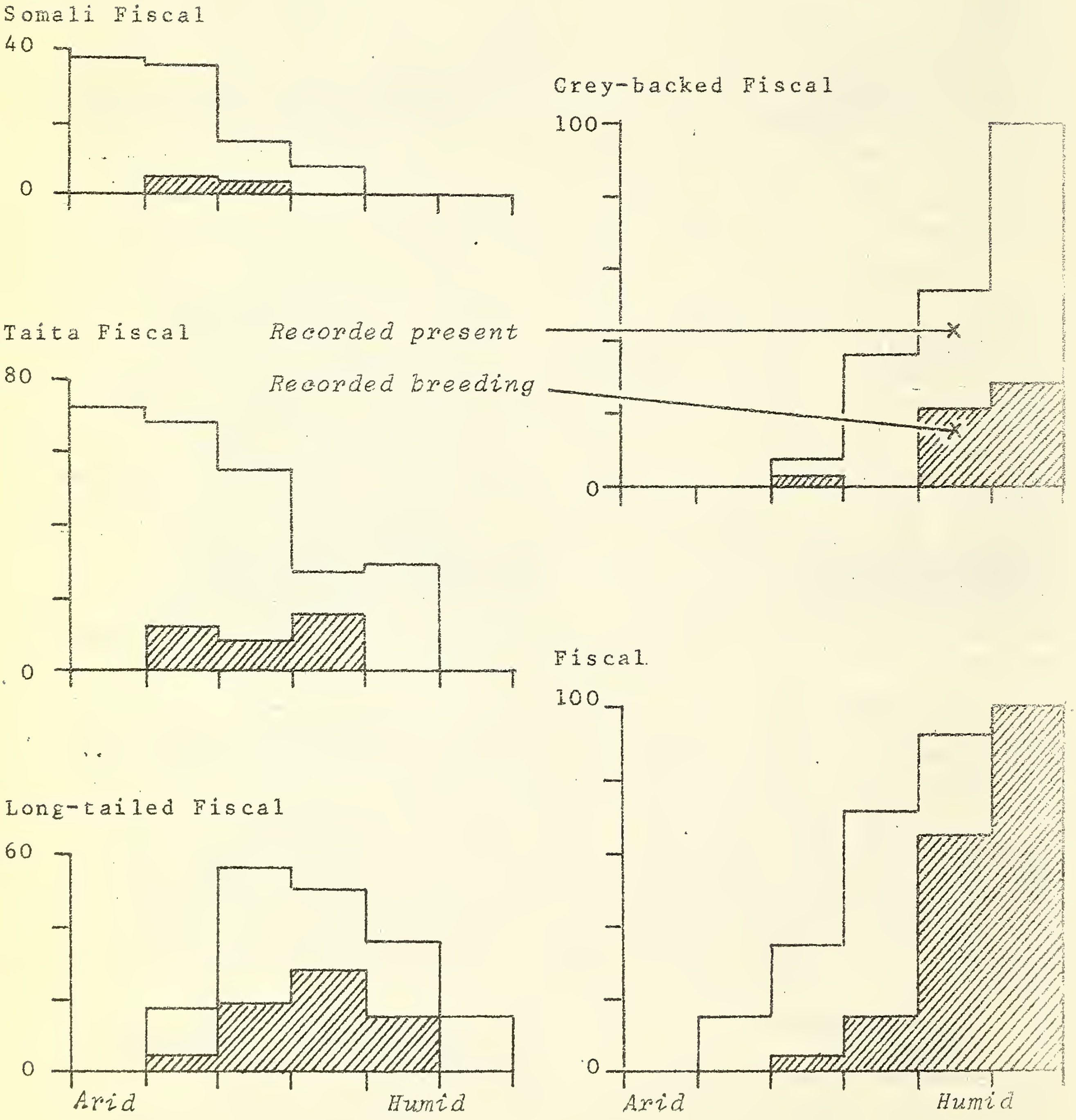
For Masked Weavers, *P. intermedius*, and Chestnut Weavers, the intermediate moderate-rainfall areas appear to be the most favoured, and both of these species were at times serious pests of sorghum and bulrush millet at Masalani.

The Red-eyed Dove and Grosbeak Weaver, *Amblyospiza albifrons* are clearly birds of higher rainfall areas. The Dove, however, wanders a great deal outside its breeding season, whilst the Grosbeak Weaver is found only near water, mainly along rivers such as the Kibwezi. Both the Grosbeak and the two Doves can cause serious damage to sunflowers (Gichuki, 1982).

2. Fiscal Shrikes - their distribution related to a moisture index

People studying plants sometimes prefer to use a moisture index rather than just rainfall when considering plant growth. A number of different moisture indices are in use, but most

FIGURE 2. Distribution of Fiscal Shrikes in relation to a moistu index. *The vertical scale shows the percentage occurrence.*



combine measures of both rainfall and temperature, both of which affect plant growth. Moreover, water evaporates more slowly at lower temperatures, so it remains available longer for plant growth. We chose "Bailey's moisture index" (Bailey, 1979) because it is simple to use and has been widely accepted by climatologists. Six of Bailey's categories occur in Kenya, ranging from arid to humid.

The five Fiscal shrikes in Kenya (all members of the genus *Lanius*)show very different distributions in terms of the moisture index (figure 2). The Somali Fiscal, *L. somalicus* and Teita Fiscal, *L. dorsalis*, are both birds of arid and semi-arid areas, especially the Somali. The low frequencies of the Somali Fiscal, which occurs at less than 40% of arid squares and fewer still of the moister ones, probably does reflect its relative scarcity: Kenya is at the fringe of its range.

The Long-tailed, *L. cabanisi* and Grey-backed Fiscals, *L. excubitorius* are members of a superspecies with distributions that are more-or-less overlapping (see map in Lewis & Pomeroy 1982, p. 90, Fig. 4). Of the two, the Grey-backed clearly has a strong preference for moister areas - it is a bird of both the highlands and the lower Lake Victoria basin. The Fiscal, *L. collaris* is also a bird of moist areas: in Kenya it occurs almost everywhere that the Grey-backed is found, but it extends some way towards the arid areas, though less so than the Long-tailed. Where two Fiscal species occur in the same area, they often show different habitat preferences, however.

The patterns we have described help to amplify both the information in Britton (1980) and that of the distribution maps which will, we hope, appear in the Atlas in two or three years' time. In particular, they give a more quantitative aspect to the study of bird distributions. As records continue to come in, it will be possible to make the analysis more accurate - the data we used for Figure 1 and 2 are only provisional for this reason.

Acknowledgements

We are greatful to Mrs Mary Sinclair and Ms Beatrice Tengecho for reading a draft of this article and commenting on it.

References

Bailey, H.P. 1979. Semi-arid climates: their definition and distribution; pp 73-97, *in* 'Agriculture in semi-arid environments'. Eds A.E. Hall, G.H. Cannell and H.W. Lawton. Springer-Verlag, Berlin.

Britton, P.L. (1980). *Birds of East Africa*. EANHS, Nairobi

Gichuki, N.N. 1982 The ecology and pest status of some granivorous birds in eastern Machakos District, Kenya. Unpulbished M. Sc. thesis, University of Nairobi.

Lewis, A.D. & Pomeroy, D.E. 1982. A bird atlas for Kenya: further progress. *EANHS Bulletin* 86-91.

D.E. Pomeroy, Zoology, P.O. Box 43844, NAIROBI

Adrian D. Lewis, Geology, P.O. Box 30197, NAIROBI

A. Mutere, Zoology, P.O. Box 43844, NAIROBI

COMEDY OF SQUIRRELS

The Bush Squirrel, *Paraxerus ochraceus*, abounds in my garden near Thika, Kenya, and they have, and continued to provide me with many hours of amusement, but more so now that the flying termites (species unknown) are hatching.

Sitting on my varandah one morning last week, there must have been twenty squirrels on the lawn, some jumping up to two feet in the air, attempting to catch the termites.

Occasionally, two squirrels would go for the same termite, with the resultant clash of heads, proceeded by a fight to see who was going to get the food.

By the time the combatents drew apart, the termite had continued on its way, and so for the two squirrels it was back to the fray, to work out who was to blame !

It is a great comedy show, guarenteed to raise a smile from the most bad tempered of morning risers.

Mr F. Davey, P.O. Box 365, THIKA, Kenya

SOCIETY WEEKEND AT FISHERMANS CAMP, NAIVASHA

The benefits of living in Nairobi for keen safari enthusiasts were realised by some 30 of our members in the last outing to the Top Camp at Lake Naivasha between 27th and 30th August 1982. With less than an hour and a half of smooth tarmac behind us and only a short length of dusty murran we were sitting down to enjoy the warmth and beauty of the Naivasha environment which contrasted sharply with the gloomy mist of Nairobi's winter weather left behind.

There were both tent and banda camping facilities at Fishermans, complete with showers and loos. By Friday evening most bandas were occupied and our own tents were erected in a very attractive site just below the banda plateau which still afforded us a magnificent view of the lake below.

Saturday dawned bright and sunny and the early risers were still enjoying the prolific bird life in the area, being woken by the repetitive call of the Rufous-naped Lark, *Mirafra africana*, which makes a welcome change from the domestic cockeral, *Commonus racketus* ! Plenty of Sunbirds were flitting through the camp site euphorbias en route for their favourite *Leonotis* which must rate as one of the most attractive weeds ever devised. At the lakeside, only 5 minutes walk from camp, the tall acacias contained a multitude of birds including no less than three pairs of Fish Eagles, *Haliaeetus vocifer*, two groups of which had constructed nests in the top canopy. The hybrid Fischer's/Yellow-collared Lovebirds, *Agapornis*, raucously advertising their presence, as did the Brubru, *Nilaus afer*, with his strident trill.

The lake was inviting and a number of members took advantage of the owners' kind offer to use the rowing boats free of charge. Plenty of zig zagging ensued in efforts to avoid the enormous stands of Papyrus, for they were found to contain myriads of lake flies. Floating corks were lifted to reveal large number of Crayfish tangled in the rope below and these were eagerly gobbled up by the Long-tailed Cormorant, *Phalacrocorax africanus*, not, however, without some difficulty.

Little Egrets, Egretta garzetta, in full breeding plumage and Goliath Herons, Ardea goliath, stood like sentinels in the reeds while Pied Kingfishers, Ceryle rudis, hovered overhead before plummeting into the water at breakneck speed to expertly catch their fishy breakfast. Several Night Herons, Nycticorax nycticorax, were disturbed from their slumbers in the Papyrus and on the water Little Grebes, Tachybaptus ruficollis, dived continuously for their food. By 11 a.m. the sun was very hot and most boats returned to the shallows to join a solitary Pink-backed Pelican, Pelicanus rufescens, scooping up the large quantities of fish.

In true tourist style the next few hours were set aside "for our own leisure" until late afternoon when the energetic members joined Lise Campbell in a hill climb above the bandas. As usual, the flowers, plants and vegetation were expertly identified and everyone enjoyed the marvellous panoramic view of the lake. Few birds were seen but a small flock of Red-winged Starlings, Onychognathus morio, flew by and a Secretary Bird, Sagittarius serpentarius, was spotted on a distant hill side. A herd of Zebra, over 20 of them, provided the only mammal record, but evidence of the Aardvark activities and spoor of other antelope were found. On the return trip African Sand Martins, Riparia paludicola, were found to be nesting in the bank of a steep gully and at dusk large numbers of Mottled and Nyanza Swifts, Apus aequatorialis and A. niansae came wheeling round the hillside en their evening feeding flight.

Everyone was safely back in camp when the heavens opened to put pay to the proposed evening camp fire. Sunday again dawned with bright sunshine and a large group proceeded downhill for another bird walk, quickly being rewarded with sightings of Variable, Bronze and Scarlet-chested Sunbirds, Nectarinia venusta, N. kilemensis and N. senegalensis. At least six White-fronted Bee-eaters, Merops bullockoides, glided round like paper aeroplanes and cooperatively came te rest on the overhead electric wires to display their remarkably colourful plumage. Near the lake a single Acacia tree harboured over ten bird species including Spekes, Spectacled and Baglafecht Weavers, Ploceus spekei, P. ocularis and P. baglafecht, a pair of Grey Woodpeckers, Mesopicos goertae, and the inevitable Chin-spot Batis, Batis molitor. In adjoining trees a pair of Grey-backed Fiscals, Lanius excubitorius, were nesting and a Black Cuckoo Shrike, Campephaga flava were seen.

The boat excursion was again undertaken by some members and the rewards were very beneficial as a number of Pythons were seen basking on the reeds. They slipped quickly into the water on our approach but one member managed to pull one aboard and, despite being bitten on the arm, proceeded to show us in detail its scales and sex organs. Fortunately he let it back into the water before it got too tight a grip on his arm ! A further surprise awaited us when an owl was disturbed in the Papyrus but it quickly fluttered into deeper cover. Its white face and underwings would suggest that it was a Barn Own, Tyto alba (does anyone else have any records of this species roosting in Papyrus ?). The Yellow-billed Duck, Anas undulata, Hottentot Teal, A. hottentota and Red-knobbed Coot, Fulica cristata were seen on the water and a few waders, including Greenshank, Tringa nebularia, Common and Wood

Sandpipers, Actitis hypoleucos and Tringa glareola, proved to be surprisingly tame as we passed their hunting grounds on the mud banks.

Reluctantly most campers made preparations to proceed homeward after lunch but a cold drink stop at the Lake Hotel resulted in further discoveries for those interested in natural history. The BBC cameramen were in action, filming such events as the aerial antics of the Pied Kingfisher for a forthcoming series of programmes to be called 'Planet Earth', to be introduced by none other than David Attenborough. If you were therefore unfortunate enough to miss this safari, perhaps you will enjoy it in retrospect on a future video tape.

Our thanks to Tim and Lise Campbell for a well organised and enjoyable weekend, and to the owners of Fishermans Camp, Mr and Mrs Mervin Carnelley for their excellent accomodation.

Clive Briffett

REQUESTS FOR INFORMATION

Breeding of the Paradise Flycatcher While the Kenya Bird Atlas has many breeding records of the Paradise Flycatcher from the highlands, we find that there are NONE from the coast. Thus if anyone has a breeding record of any type (ie including nest building or even simple courtship display) from the coast, this would certainly be of use. All correspondence please to Adrian Lewis, Geology, P.O. Box 30197, NAIROBI.

Patas and DeBrazza's Monkeys I should be most grateful if anyone who has seen Patas Monkeys (Erythrocebus patas) on the pipeline road between Amboseli and Sultan Hamud could inform me and if at all possible give map location and size of group.

I should also be grateful if anyone has a confirmed recent sighting of DeBrazza's Monkeys (Cercopithecus neglectus) in the Saiwa Swamp. All correspondence please to Anna H. Merz, P.O. Box 24897, NAIROBI.

SOCIETY'S BIRD MIGRATION FUND

The Society currently has a fund for the support or assistance of studies of bird migration in eastern Africa. Applications to this fund are invited. These should include an outline of the project concerned, together with details of its costings. These should be submitted initially to the Society's Ornithological Sub-Committee (Secretary, D.A. Turner, P.O. Box 48019, NAIROBI).

NOTICE TO ANYONE INTERESTED IN BIRDS

Are you a birdwatcher/photographer/ringer newly arrived in Kenya, and in search of details of local birds, good areas to visit, relevant literature and ringing and other research schemes ? Contact Adrian D, Lewis, Geology, P.O. Box 30197, NAIROBI for information.

REQUEST FOR SLIDES FOR WILDLIFE CLUBS OF KENYA

At a recent meeting of the Society, Nathaniel arap Chuno, the National Organiser, gave an interesting talk on the operation and objectives of these clubs. I have recently been involved in reorganising the slides which the clubs have received from various sources including our own membership. The slides are being made use of in two ways :

a) To produce package programmes of 20 - 25 slides on specific topics mainly relating to mammals and birds together with a booklet giving a short commentary for each slide. These are then sent out to schools on request for use in a lesson on wildlife to assist in informing and instructing children on the need for appreciating and protecting wildlife.

b) To provide a bank of slides from which one-off programmes can be drawn as required.

In order that both these objectives can be fully achieved many more slides would be welcome. If any member can assist by sending us slides which they would otherwise throw away or never use we would be very grateful. As well as mammals and birds, views can be made use of provided they are in Kenya and identified.

I am sure you will agree that this is a worthy cause and what better way is there to conserve our resources.

If you can help, please contact me direct on Tel. Nairobi 582736 or deliver to either the Wildlife Clubs of Kenya Headquarters adjoining the entrance to the Museum car park, or to the Society's office, also at the National Museum. Many thanks.

Clive Briffett, P.O. Box 52428, NAIROBI

BACK COPY OF BULLETIN REQUIRED

While compiling a bird index for the EANHS Bulletin, it has come to light that the Society does not have any spare copies of the November/December 1979 issue. if anyone has a spare copy of this, could it please be briefly loaned to the compiler so that the index can be completed. The issue could be handed to the Society's office, or sent to Miss P.M. Allen, P.O. Box 14166, NAIROBI. Thank you.

WANTED

A used copy of Macmillan, H.F. Tropical Planting and Gardening 1946 ed. Please contact Mrs S.A. Robertson, c/o P.O. Box 90590, MOMBASA, Kenya. Thank you.

FOR SALE

Available in early December :

Brown & Britton Breeding Seasons of East African Birds 60/-
Britton (Ed.) Birds of East Africa 100/-
Mackworth-Praed & Grant Birds of Eastern & North Eastern Africa Vols 1 & 2. Vol 2 very slightly damaged, dropped on one occasion. 1000/-
Contact D.F. Kent, phone 582311 ex. 325 between 8.15 to 4.30.

FOR SALE

8 Clubs, 8 Balls and Bag - suit beginner (Golf !)	1000/-
V.W. Beetle Chains (Eazy-fit) as new	280/-
Beetle (or other car) Verandah - asset when camping	400/-
Air Matress, long, wide and deep (2mx1mx10cm)	200/-
Li Lo Air Matress, full size, clean, no leaks	100/-
Camp Bed (Brit. Army type - X frame folding) servicable	40/-
Large Sleeping Bags, 2 singles or zip-up for double ! clean, warm and condition generally new (2) each	250/-
Tent, imported, completely waterproof whilst good ventilation, built-in ground sheet - ample room for 2 six-footers in beds (or 3 in bags) plus end space for gear (or baby !), condition as new	900/-
Folding Chaise-Longue (doubles as camp bed), recovered in canvas	150/-

Please contact Mrs Booth, c/o Swiss Embassy, office hours Monday - Friday only, phone 28735 - 24 or write Box 42057, NAIROBI.

SPECIALIZED EDUCATION SERVICES

Kigwa Pre. Preparatory Class, Garden Estate Road, Lower Kiambu, opposite Braeburn High School.

Tuition for children age 4 - 7 years, maximum of nine pupils in a group - English Pre-Prep. syllabus. Thorough all-round education with emphasis on high academic achievements and courteous discipline.

Applications to : Mrs T.M.J. Kroll, P.O. Box 30181, NAIROBI.

HUNTER'S LODGE AND CLUB

Hunter's Lodge and Club, P.O. Box 67868, Nairobi or P.O. Box 77, MAKINDU, Kenya, announce that they are now offering a special flat rate for residents up to the end of the year. The rate is Shs 150/- per person inclusive of all meals, taxes and service charge. Contact direct.

SOCIETY NOTES

1983 Subscription Renewals Yes, that time is approaching once again, and the first renewal form is enclosed with this issue of the Bulletin. The Secretarys are always grateful to those who renew early as this helps to reduce the vast amount of work at the beginning of the new year. Please return the completed form to the Secretary, P.O. Box 44486, NAIROBI.

Wild Flowers of Kenya At long last we have a good stock of Sir Michael Blundell's book at Shs 200/- to members. An ideal Christmas present, so do call into the office and purchase your copies. Postal orders accepted, please add Shs 7/50 for packing and postage.

Birds of East Africa Again an excellent Christmas present for those who need up-to-date information on the distribution, habitat and status of East African irds. Shs 130/- to members. Orders to the Secretary, P.O. Box 44486, NAIROBI.

Africana Books We still have some out-of-print Africana books for sale at reasonable prices. Please call and take a look in the office at the National Museum, or write for a list to The Secretary, P.O. Box 44486, NAIROBI.

Office Hours We try to be open for members on Tuesdays to Fridays, 9 a.m.-11.30 a.m.; 2 p.m.-3.45 p.m., Saturdays from 9.30 a.m.-11 a.m. Please remember that we are CLOSED ON MONDAYS.

Unusual Gifts We have some unusual items which one would not necessarily associate with this Society - things which have been donated to the Society for re-sale, so come and see if you have been searching for that elusive Christmas present ! Office hours as above.

Bulletin Copy Our sincere thanks to those who have been sending in their notes and records for the *Bulletin*. Please keep them coming - address - The Editor, P.O. Box 44486, NAIROBI.

Library A reminder that we have, in conjunction with the National Museum, an excellent Africana Library housed in the Museum. Extensions are almost complete, and once the Library has completed its move, there will be plenty of space for readers. Many of the books and all periodicals are for reference only, but some books may be borrowed. Do call in and see the Librarian, Mr Otike, and remember to bring your membership card.

NEW MEMBERS

The following new members have been elected to the Society :

Local Full Members

Mrs J.R. Arliss, P.O. Box 43827, NAIROBI
Dr and Mrs F. Bell, SR-CRSP, P.O. Box 58137, NAIROBI
Brenda R. Benefit, National Museums of Kenya, P.O. Box 40658, NAIROBI
Roy Cooper, P.O. Box 2997, ELDORET, Kenya
Dr Robert C. Davis, Dept. of Zoology, K.U.C., P.O. Box 43844, NAIROBI
Mr Gufler, P.O. Box 49420, NAIROBI
Dr J.N. Maina, Dept. of Veterinary Anatomy, P.O. Box 30197, NAIRONI
Henry Kegwaro Okero, University College of Eastern Africa, P.O. Box 2500, ELDORET, Kenya
Barbara Sigman, P.O. Box 34093, NAIROBI
Don Stalker, P.O. Box 14983, NAIROBI
Colin Taylor, P.O. Box 49010, NAIROBI
Mrs Ann Woodward, P.O. Box 9, NANYUKI, Kenya

Overseas Full Member

Robert Worthing, 48 Glendale Ave, Livingston, NJ 07039, U.S.A.

Change of Status to Life Membership

Mr Mike Gilbert, 70 Stratford Street, OXFORD OX4 1SW, U.K.
Dr W.F. Shadel, 300 W Ben Ure Island, Oak Harbor, Washington 98277, U.S.A.

SOCIETY FUNCTIONS

November 19th, 20th and/or 21st 1982 or any or all of the dates mentioned or adjoining dates: special Society discount at Naro Moru River Lodge. Please see the September/October Bulletin for details.

Sunday 28th November 1982 Fifth Annual Nairobi Bird Census Please see the September/October Bulletin for details.

Monday 6th December 1982 in the National Museum Hall, Nairobi at 5.30 p.m. Dr John Dittami of the Baharini Research Centre, Lake Nakuru will give an illustrated lecture on ANNUAL CYCLES AND THE CONTROL OF BREEDING IN SOME AFRICAN PASSERINES.

December 10th - 13/14th 1982 Field trip to Ol Lolokwe: Leaders Mr and Mrs L.A.S. Grumbley. (Weather and security conditions permitting). Ol Lolokwe is the imposing mountain behind Samburu Park. Camping will be in the low thorn bush country at the foot of the mountain, and walking parties will be arranged to go up the mountian to study the birds and unusual montane forest at the top. Parties will have to be completely self contained with water and full camping equipment and petrol for the return journey. By road the camping place will be about 33 miles north of Isiolo. If you would like to take part in this excursion to an interesting and beautiful area, please fill in the enclosed form and return it to Mrs A.L. Campbell, P.O. Box 14469, Nairobi as soon as possible - not forgetting to enclose a stamped, self-addressed envelope.

FRIDAY 7th JANUARY 1983 at 7 p.m. The famous ornithologist and author, Mr James A. Hancock will give an illustrated lecture on HERONS AROUND THE WORLD. Please make a note of this special lecture, which will be held in the Louis Leakey Memorial Hall in conjenction with the Kenya Museum Society and the Wild Life Society.

Sunday 9th January 1983 Informal Day Trip. Please meet at the National Museum and bring a picnic lunch and walking shoes, plus ideas of places you would like to visit.

Sunday 16th January 1983 All day excursion to Mayers' Ranch, Kedong, by kind invitation of Mrs Hazel Mayers. Please meet at the National Museum at 9 a.m. sharp and bring a picnic lunch.

Monday 14th February 1983 in the Museum Hall, Nairobi at 5.30 p.m. MEMBERS SLIDES. Please bring 10 of your best slides and tell fellow members about them.

Monday 14th March 1983 in the Museum Hall, Nairobi 1t 5.30 p.m. ANNUAL GENERAL MEETING followed by a slide show or talk.

THE CHAIRMAN AND MEMBERS OF MAIN COMMITTEE WOULD
LIKE TO WISH ALL SOCIETY MEMBERS A VERY HAPPY
CHRISTMAS AND ALL GOOD WISHES FOR THE NEW YEAR

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J.S. Karmali
Vice-Chairman: Prof. J.O. Kokwaro
Joint Editors, Jl E. Africa nat. Hist. Soc. Nat. Mus., M.E.J. Gore, Miss S. Karmali
Secretary/Treasurer: Miss D. Angwin
Asst. Secretary/Treasurer: Mrs. E.B. Angwin
Hon. Librarian: Mrs. C. Taylor
Executive Committee : (in addition to the above): G.C. Backhurst (Ringing Organizer), Mrs. A.L. Campbell, N. arap Chumo, M.P. Clifton **(Editor EANHS Bulletin)**, Mrs. J. Hayes, Dr. A.D. Lewis, D.A. Turner
Co-opted Members: P.B. Taylor (Nest Record Scheme Organizer), Mrs. F. Ng'weno, S. Njuguna, Dr. D. Pearson, D.K. Richards, Mrs. P. Wootton, P. Davey
Journal Editorial Sub-Committee : M.E.J. Gore, Miss Karmali
Ornithological Sub-Committee: Dr. D.J. Pearson, G.C. Backhurst, D.A. Turner, Dr. A.D. Lewis, B.S. Meadows, Prof. D.E.Pomeroy, D.K. Richards, T. Stevenson, P.B. Taylor, Dr. K. Howell, J. Beesley, N. Baker, (Tanzania), Dr. M. Carswell (Uganda), J.F. Reynolds, P.L. Britton (United Kingdom)
Joint Library Sub-Committee : (Society representatives) Mrs. C. Taylor, M.P. Clifton.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the Joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the **EANHS Bulletin** every two months; a copy of each **Journal** published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers and runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes **The Journal of the East Africa Natural History Society and National Museum.** Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated magazine issued six times a year, which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to The Editor (**EANHS Bulletin**), Box 44486, Nairobi, Kenya. Line drawing will be considered if they add to the value of the article. Photographs cannot be published.

SCOPUS

The Ornithological Sub Committee publishes this quartely bird magazine. Cost: EANHS members KShs. 75/= p.a. All correspondence to D.A. Turner, Box 48019, Nairobi, Kenya.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: KShs. 750/=
Institutional (schools, libraries)	annual payment: KShs. 70/=
Full Local and overseas	annual payment: KShs. 70/=
Junior (full-time student, no **Journal** supplied)	annual payment: KShs. 10/=

Subscriptions are due 1st January. From 1st July you may join for KShs. 35/= and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

0 1546

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01230 2840